

SYLLOGE FUNGORUM

OMNIUM HUCUSQUE COGNITORUM

DIGESSIT

P. A. SACCARDO

VOL. XXII.

Section I.

SUPPLEMENTUM UNIVERSALE

Pars IX. - Sect. I.

Pag. 1 ad pag. 822 16 DEC.

Ascomycetæ

(editæ usque ad finem anni MCMX)

AUCTORIBUS

P. A. SACCARDO ET ALEX. TROTTER

Neminem latet, Syllogen nostram diagnoseon collectionem ordinatam, non vero [nisi in observatis propriis] opus criticum sistere. Hoc faciant monographi et floristæ et benevole meminerint, quid vere sit Sylloge nostra, ne nobis tribuant errores, qui nostri non sunt.

Syll. Fung. V (1887) in premonitu.

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PATAVII

Die XX Augusti MCMXIII — Sumptibus P. A. SACCARDO
TYPIS SEMINARI

SUMMA FUNGORUM HUCUSQUE COGNITORUM

Species in voluminibus I-XVIII descriptæ	57,660
Species in voluminibus XXI et XXII descriptæ	8,955
Species fungorum in toto opere descriptæ	<u>66,615</u>

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P. A. SACCARDO

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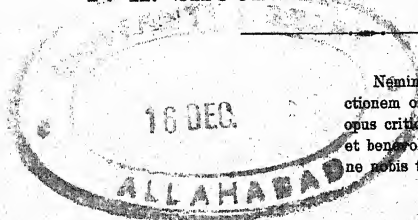
Pars IX.

Ascomycetæ-Deuteromycetæ

(editæ usque ad finem anni MCMX)

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Fol. 101 — Pretium it. lib. (francs) 101

PATAVII

Die XX Augusti MCMXIII — Sumptibus P. A. SACCARDO

YPIΣ SEMINARI

98772

EGREGIIS VIRIS

CH. B. PLOWRIGHT (1849-1910)

ANGLO

RUD. ADERHOLD (m. 1907), MAX BRITZELMAYR (1838-1909)

JULIO KÜHN (1825-1910), RUD. HESSE (1844-1912)

GUST. HERPELL (m. 1912)

GERMANICIS

FR. X. GILLOT (1842-1910), LEONI MARCHAND (1833-1911)

ED. BORNET (1828-1911), LEONI ROLLAND (1842-1912)

JULIO DE SEYNES (1837-1912), ED. GRIFFON (1869-1912)

L. CRIÉ (m. 1912), JULIANO GODFRIN (m. 1913)

GALLICIS

JULIÆ COM. TURCO-LAZZARI (1848-1912)

ITALICÆ

A. P. MORGAN (1836-1908)

BOREALI-AMERICANO

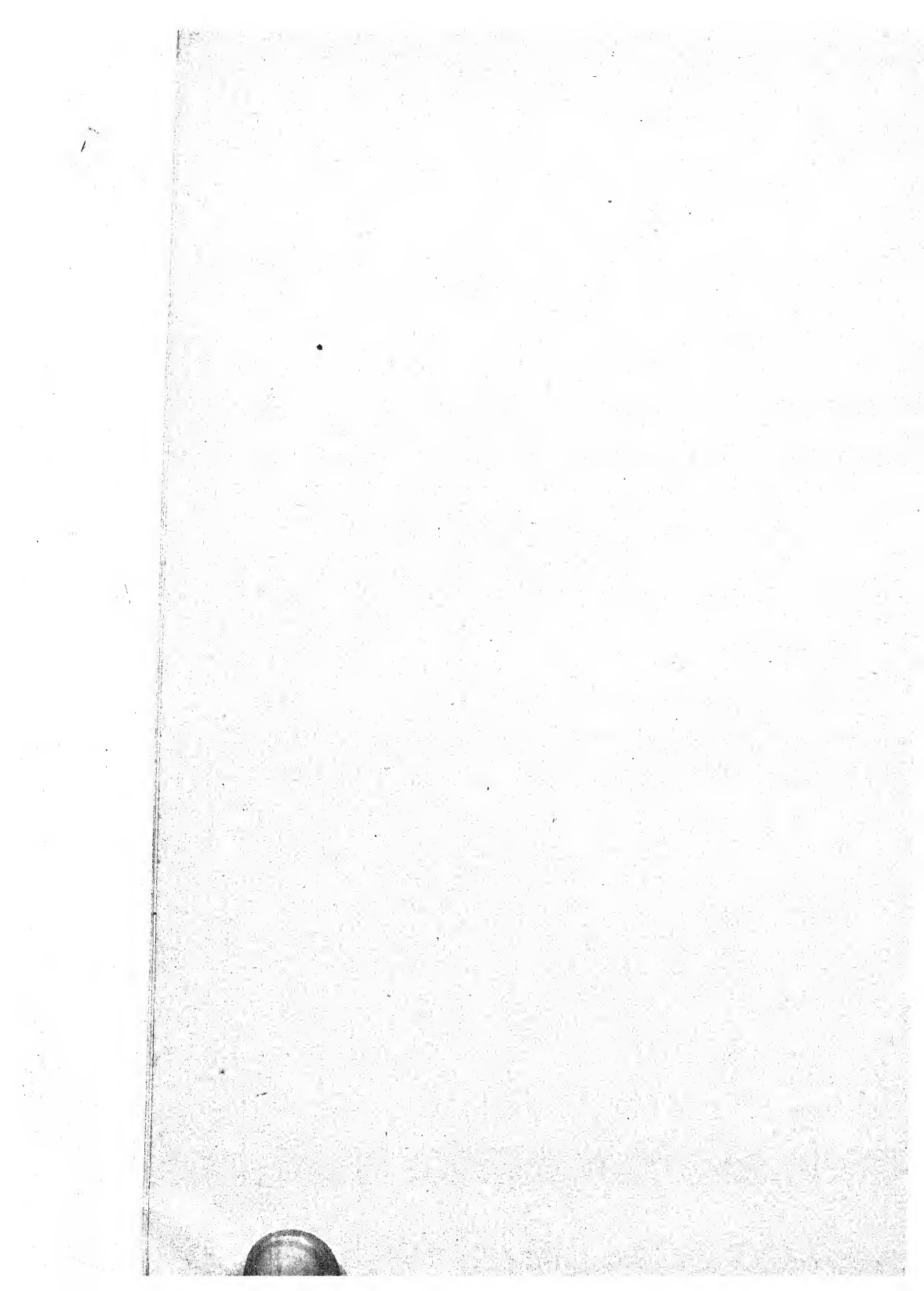
DE SCIENTIA MYCOLOGICA BENEMERENTIBUS

QUINQUENNIO ULTIMO DEMORTUIS

VOLUMEN HOC

DICANT

P. A. SACCARDO ET AL. TROTTER



LABOULBENIOMYCETÆ Peyr. (*)

Syll. VIII p. 909, IX p. 1130, XIV p. 725, XVI p. 674, XVII p. 915.

Conspectus tribuum, subtribuum et generum Laboulbeniomycetum

sec. Thaxt. Monogr. Laboulb. II (1908) p. 236-239.

- 1 Antheridia ex cellulis specialibus v. cellularum aggregationibus specialibus formata. **LABOULBENINÆ** 80
- 2 Antheridia composita; cellulae antheridiales endogenae e cellula una v. pluribus intercalaribus formata et intra et ab communi loculo evacuantia. (subinde libera sed compacta in *Distichomyce*). **PEYRITSCHIELLACEÆ** 35
- 4 Individua unisexualia **DIMORPHOMYCETÆ** 7
- 5 Perithecia ex axe primario verticali v. obliquo oriunda. **Dimeromyces** 6
- 6 Perithecia ex uno v. pluribus axibus secundariis cellula subbasali suffultis oriunda. **Dimorphomyces**
- 7 Individua hermaphrodita; appendices steriles 1-cellulares basi atratae. 20
- 8 Antheridium liberum a receptaculo. **RICKIÆ** 11
- 9 Cellulae antheridiales poro communi evacuentes. **Rickia** 10
- 10 Cellulae antheridiales demum liberae sed aggregatae. **Distichomyces**
- 11 Antheridium receptaculo ex toto v. partim adnatum. **PEYRITSCHIELLEÆ** 18
- 12 Receptaculi cellulae supra cellula basali seriatae.

(*) III. prof. THAXTER anno 1908 in lucem protulit mirabilis et magni ponderis monographiae Laboulbeniacearum partem alteram, cujus eximias icones in Syll. vol. XIX-XX citari curavimus. Hic tantum utilem prospectum generum ex eadem monographia traducimus et tantum brevissimas notas de generibus et speciebus novis referimus. Cfr. Syll. XIV, p. 725.

- 13 Perithecia omnino libera. 16
- 14 Receptaculi series subterminalis antheridia bina ferens. **Dichomyces** 15
- 15 Receptaculi series subterminalis antheridium singulum laterale ferens. **Peyritschella**
- 16 Perithecia distantiori parti receptaculi adnata.
- 17 Antheridium anterius, ad peritheci basim situm. **Limnæomyces** 18
- 18 Antheridium ad basim appendicum; supra pedicellum adsunt binæ cellulæ superpositæ. **Chitonomyces** 19
- 19 Antheridium ut in n. 18; cellulæ supra pedicellum ternæ. **Hydræomyces**
- 20 Individua hermaphrodita; appendices steriles pluricellularia, ima basi atrata. **ENARTHROMYCETÆ**
- 21 Individua hermaphrodita; appendices steriles absentes v. basi atrata carentes. **Enarthromyces** 21
- 22 Antheridium evacuans inter cellulas quaternas appendiculatas. **MONOICOMYCETÆ** 25
- 23 Cellulæ antheridiales in 4 paria opposita dispositæ. **Monoicomycetes** 24
- 24 Cellulæ antheridiales copiosæ. **Eumonoicomycetes**
- 25 Antheridium per porum liberum dehiscens. **HAPLOMYCETÆ**
- 26 Cellulæ antheridiales discretæ a cellulis sterilibus supra cellulam pedicelli appendicis sitis. 29
- 27 Antheridium terminale, rotundatum, areolatum, poro laterali spinaque terminali præditum. **Haplomyces** 28
- 28 Antheridium conicum poro terminali prominenti præditum. **Camptomyces**
- 29 Cellulæ antheridiales cum cellulis sterilibus supra cellulam pedicelli appendicis aggregatæ. 30
- 30 Cellulæ antheridiales numerosæ, in oblique superpositas series dispositæ, cum cellula sterili marginali sociatæ, poro apicali. **Eucantharomyces** 31
- 31 Antheridium poro laterali dehiscens infra partem cellulosa terminalem sterilem. **Cleidomyces** 32
- 32 Cellulæ antheridiales paucae dehiscentes in loculum supra cellulas binas externas extensum usque ad loculum terminalem et porum. **Euhaplomyces** 33

- 33 Antheridium areolatum, laterale infra steriles ramulos terminales. **Cantharomyces**
- 34 *Incertæ sedis*; cellulæ ascogenicæ copiosissime (vide 46). **Polyascomyces**
- 35 Antheridia ex cellulis singulis, tubulis efferentibus liberis præditis efformata. **LABOULBENIACEÆ**
- 36 Individua unisexualia. 42
- 37 Perithecia receptaculis secundariis hospiti immediate hærentia. **HERPOMYCETÆ**
- Herpomyces** 38
- 38 Perithécia e receptaculo primario oriunda. **AMORPHOMYCETÆ**
- 39 Receptaculum bicellulare in perithecia desinens; sporidia continua. **Amorphomyces** 40
- 40 Receptaculum in prominentiam bicellularem desinens; sporidia 1-septata. **Dioicomyces** 41
- 41 Receptaculum pluricellulare, chaetophorum (*Incertæ sedis*). **Smeringomyces**
- 42 Individua hermaphrodita; receptaculum primarium processu secundario carens (ex evolutione intercalari). 75.
- 43 Receptaculum simplex v. axe libero secundariæ origines carens. 69
- 44 Appendix antheridialis, constans ex singula simplici serie cellularum superpositarum, a ramulis sterilibus v. appendicibus separata. **STIGMATOMYCETÆ** 50
- 45 Cellula subterminalis appendicis sterilis, cellula infra posita antheridia plura gerens, terminalis cellula antheridium unicum spinosum gerens. **Acompsomyces** 46
- 46 Appendix ex cellulis pluribus applanatis irregulariter superpositis constans, apice processu cupuliformi aucta; cellulis ascogenis valde copiosis (*Incertæ sedis* v. n. 84). **Polyascomyces** 47
- 47 Appendix antheridialis quinquecellularis; bina antheridia superposita e cellula terminali et subterminali orientia. **Acallomyces** 48
- 48 Pars distantior fertilis appendicis constans ex duabus v. pluribus cellulis superpositis, quæ exerunt antheridia in seriem singulam v. duplicem disposita. **Stigmatomyces** 49
- 49 Antheridia plus v. minus distincte verticillata in parte terminali fertili appendicis **Arthrorrhynchus**

- 50 Appendices antheridiales v. rami 2-plures cum ramis sterilibus ramulisque sociati.
- 51 Receptaculum, proliferationis ope; extremitate multicellulare, ceteris cellulis copiose appendiculatis. 58
- 52 Appendix primaria cellularum superpositarum ramulos antheridiales extus superpositos exerens; ramuli similes e cellulis unilateraliter orientes ad basim pedicelli perithecialis.

IDIOMYCETÆ**Idiomyces 53**

- 53 Appendices primariæ nullæ matura ætate.
- 54 Receptaculum obconicum, cellulæ proliferæ exerentes extremitate fasciculum densum appendicum, basim pedicelli perithecialis obducentem. **TERATOMYCETÆ 57**
- 55 Rami steriles pauci, cellulæ antheridiales intercalariter in series continuas dispositæ. **Symplectomyces 56**
- 56 Rami ramulique steriles copiosi, cellulæ antheridiales liberæ, extus in series irregulares superpositæ ad ima appendicum segmenta, cum cellulis sterilibus rostellatis sociatæ.

Teratomyces 57

- 57 Receptaculum subtriangulare, applanatum, processibus binis bicellularibus peritheciisque binis sociatum, cellulæ proliferæ supra basim appendices copiosas ramosas exerentes.

Diplomyces

- 58 Receptaculum e cellulis binis superpositis constans, superior gignens appendicem plus v. minus distinctam primariam nec non unum v. plura perithecia pedicellata 68
- 59 Rami antheridiales exerentes antheridia serialiter intercalaria.

CORETHROMYCETÆ

- 60 Appendices primariæ hyalinæ e cellula basali ramulos gignentem, perithecia secundaria efformata æque ac primaria.

Rhadinomyces 61

- 61 Appendices primariæ plus v. minus atratæ, earum cellula basalis exerens perithecia secundaria (si adsint).

Corethromyces

- 62 Antheridia libera, singula v. aggregata in appendicibus vel earum ramis sita.

LABOULBENIÆ

- Axis primarius appendicum e cellulis binis superpositis constans, superior gerens seriem ramorum e quorum basi oriuntur ramuli antheridia singula v. aggregata proferentes.

Eucorethromyces 64

- 64 Appendix constans e cellulis pluribus superpositis extima ramos steriles gerens, basalis sæpe perithecia gignens, ceteræ ex angulo superiore emittentes ramulos breves antheridiales.
Stichomyces 65
- 65 Appendix constans e cellulis numerosis superpositis, cellula basalis libera sterilis et specialis, ceteræ extus series ramulorum superpositorum gerentes, quorum cellula basalis antheridia singula v. aggregata gignunt.
Rhizomyces 66
- 66 Appendix constans e cellulis superpositis, cellula basalis adnata, sterilis æqualis, ceteræ introrsum appendiculatæ, ramuli antheridia plus v. minus irregulariter proferentes.
Sphaleromyces 67
- 67 Appendix bicellularis, cellula extima atrata proferens ramulos steriles et antheridiales.
Ceraomyces
- 68 Receptaculum multicellulare, ex cellulis subbiserialis supra cellulam subbasalem sitis constans, altera series in perithecium terminata, altera in appendices.
Laboulbenia
- 69 Receptaculum axes unum v. plures perithecigeros secundarios liberos gerens.
- 70 Axis primarius dimotus a secundario singulo, plus v. minus elongato, multicellulari, chaetophoro atque perithecium subterminale gerente.
RHACHOMYCETÆ
- Rhachomyces 71**
- 71 Receptaculum constans ex axe biseriali multicellulari perithecigero, axesque lateraliter similes, quoque perithecigeros proferens.
CLEMATOMYCETÆ
- Clematomyces 72**
- 72 Axes perithecigeri unicellulares, extreme appendiculati infra pedicellos peritheciales.
COMPSOMYCETÆ
- 73 Individua solitaria ramis subverticillatis fertilibus et sterilibus, ex receptaculo bicellulari.
Compsomyces 74
- 74 Individua dense fasciculata ex haustorio celluloso communi in hospitem penetrante oriunda.
Moschomyces
- 75 Receptaculum indeterminatum v. divisionis secundariæ cellularum ope prolongatum.
- 76 Appendix primaria constans ex axe definito cellularum superpositarum (cfr. quoque n. 84). **79**
- 77 Receptaculum et primaria appendix axem cellularum superpositarum setiformem formantia, ramos, perithecia et ulte-

riores ramulos in seriem unilateralem disposita gignentia.

CHÆTOMYCETÆ

Chætomyces 78

- 78 Receptaculum ob secundarios processus versiforme, ramulos nullos infra perithecia gerens.

ECTEINOMYCETÆ

Ecteinomyces

- 79 Appendix primaria constans ex prominentia subrotunda cellulari prope perithecium, ramulis terminalibus evanescentibus (*incertæ sedis*).

MISGOMYCETÆ

Misgomyces

- 80 Antheridia ex cellulis non v. parum mutatis appendicum v. eorum ramis formata. Species plerumque aquaticæ.

CERATOMYCETINÆ

- 81 Receptaculum contextu multicellulari compacto carens. **90**

- 82 Receptaculum infra perithecia nullas appendices gerens.

CERATOMYCETÆ 89

- 83 Receptaculum indeterminatum **86**

- 84 Perithecium determinatum paucicellulare **Hydrophilomyces 85**

- 85 Perithecium indeterminatum pluricellulare.

Rhynchophoromyces

- 86 Receptaculum determinatum. **87**

- 87 Perithecium determinatum paucicellulare. **Autoicomycetes 88**

- 88 Perithecium pluricellulare. **Ceratomyces**

- 89 Receptaculum gerens appendices e cellulis specialibus infra perithecia sitis formatas.

COREOMYCETÆ

Coreomyces

- 90 Receptaculum contextu multicellulari compacto formatum.

ZODIOMYCETÆ

- 91 Receptaculum apice cupulatum, margine ciliato perithecia copiosa amplectente **Zodiomyces 92**

- 92 Receptaculum constans ex axē compacto, continuo cum appendice primaria apice appendiculata atque perithecia appendicesque lateraliter dense seriata gerens. **Euzodiomyces 93**

- 93 Receptaculum constans ex axē compacto, continuo cum appendice primaria apice appendiculata, quæ constat ex numerosis seriebus superpositis, quarum extrema lateraliter gerit ramos perithecigeros pluricellulares. **Cainomyces**

DIMEROMYCES Thaxt. — Syll. XIV p. 725, XVI p. 674, XVII p. 915.

1. *Dimeromyces minutissimus* Thax., Proceed. of the Am. Acad. 3322 vol. XLI, n. 11 (1905) p. 304, Monogr. Laboulb. II, pag. 242, t. 29, f. 6-9.

Hab. in superficie rhabditis Labiæ minoris, Cambridge Mass. Amer. bor. — Long. totalis usque ad apicem perithecii 50 μ .; appendices longiores 40-50 μ .; perithecia 34 \times 10.

2. *Dimeromyces Labiæ* Thax., Proceed. of the Am. Acad. vol. XLI, 3323 n. 11 (1905) p. 303, Monogr. Laboulb. II, p. 242, t. 29, f. 1-5.

Hab. in elytris Labiæ minoris, Cambridge Mass. Amer. bor. — Long. tot. ad apicem perithecii 65-75 μ .; perithecia 50-60 \times 12; sporidia 18 \times 12.

3. *Dimeromyces falcatus* Paoli, Nuovi Laboulb. parass. di Acar. in 3324 Redia VII (1011) p. 292, t. XII, f. 8-9-9*.

Hab. in Acaro Canestrinia doreicola parasitica in Pentodonte punctato prope Pisas Ital. centr. — Longit. receptaculi usque ad basim perithecii 50-51 μ .; perithecia 17-19 μ . lata; appendix inf. 80-94 μ . long., super. 53-60 (dempta utriusque cellula basali).

4. *Dimeromyces muticus* Paoli, Nuov. Laboulb. parass. di Acari in 3325 Redia VII (1911) p. 293, t. XII, fig. 10.

Hab. in Acaro Canestrinia neglecta parasitica in Scarabæo Centauro in Africa. — Longitudo receptaculi usque ad basim perith. 53-60 μ .; perithecia 80 \times 28; appendix infer. 80 μ . long., super. 44 μ . long. (dempta utriusque cellula basali).

5. *Dimeromyces mucronatus* Paoli, Nuov. Laboulb. parass. di Acar. 3326 in Redia VII (1911) p. 290, t. XII, f. 6-7.

Hab. in Acaro Canestrinia spectanda parasitica in Dorco bucephalo in ins. Java. — Long. receptaculi usque ad basim perithecii 85 μ .; perithecia 80 \times 35; appendix inf. 96-100 μ . long., super. 88-96 (dempta utriusque cellula basali).

RICKIA Cavara — Syll. XVI, pag. 689. — Ad hoc genus ducenda est: *Rickia Berlesiana* (Baccarini) Paoli, Nuov. Laboulb. etc. in Redia VII (1911) p. 288, t. XII, f. 5 — *Rhacomyses Berlesianus* Baccarini — Syll. XVII, p. 918.

1. *Rickia javanica* Paoli, Nuov. Laboulb. parass. di Acari in Redia, 3327 VII (1911) p. 285, t. XII, f. 1-2.

Hab. in Acaro Pachylælope spectabili in ins. Java. —

- Receptacula sine stipite 65 μ . long., sine antheridiis 47 μ . cr.; antheridia 17-18 μ . longa, perithecia (sine trichogyno) 34 μ . longa.
2. *Rickia Coleopterophagi* Paoli, Nuov. Laboulb. parass. di Acari in 3328 Redia VII (1911) p. 286.
- Hab.* in Acaro Coleopterophago procero in India. — Receptacula (sine stipite) 88 μ . long., (sine appendice) 58 μ . lata; stipes 30 μ . long.; antheridia 15-16 μ . longa; perithecia (sine trichogyno) 51 μ . longa.
3. ?*Rickia minuta* Paoli, Nuov. Laboulb. parass. di Acari in Redia 3329 VII (1911) p. 287, t. XII, f. 4.
- Hab.* in Acaris Holocæleno, Pachylælope et ?Megatolælope in Brasilia et Æquatoria. — Receptaculum (sine stipite) 50 μ . long., (sine appendic.) 30 μ . lat.; stipes 39 μ . long.; perithecia (sine trichogyno) 20 μ . longa.

DISTICHOMYCES Thaxter, Proceed. of the Amer. Acad. vol. XLI, n. 11, (1905) p. 308, Monogr., Laboulb. II, p. 248 (Etym. *distichos* et *myces*). — Receptaculum constans e cellula basali et subbasali, superne seriebus binis parallelis cellularum auctum; cellulæ numero variæ, extus ut plurimum aut appendicem sterilem aut antheridium gerentes; series una in perithecium, altera in appendicem primariam desinens. Appendices ad instar *Rickiæ* et *Peyritschellæ*. Antheridia maturescentia in ramulo acrogena, demum libera.

1. *Distichomyces Leptochiri* Thaxt. l. c., Monogr. p. 249, t. 71, f. 1-6. 3330 Characteres generis.

Hab. in capite, antennis et superf. inf. *Leptochiri* sp. in insula Java. — Long. total. 475 \approx 11, exempl. minor. 125 \approx 36; perithecia 50-55 \approx 15-20; appendices longiores 75 \approx 6; ramulus antheridialis 18 μ . long.

CHITONOMYCES Peyr. — Syll. VIII p. 914, XIV p. 727, XVI p. 678.

1. *Chitonomyces dentifer* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3331 n. 11 (1905) p. 306, Monogr. Laboulb. II, p. 264, t. 34, f. 26-27.
- Hab.* in elytris *Laccophili proximi* pr. Eustis et Daytona, Florida Amer. bor. — Long. tot. usque ad apicem perithecii 90-110 \approx 18-20; perithecia 65 \approx 18; pars basalis receptaculi 35 μ .; sporidia 23 \approx 3.

2. **Chitonomyces spinosus** Thaxt., Proc. Amer. Ac. Arts a. Sc. XLI, 3332 (1905) p. 808, Monogr. Laboulb. II, p. 265, t. 62, f. 40.

Hab. in artubus *Laccophili* sp. in insula Java. — Long. totalis ad apicem peritheci incl. pedicello, $130 \approx 33$; appendices marginales 45-60 μ . long.; perithecia $75 \approx 20$; sporidia $28 \approx 2.5$.

3. **Chitonomyces javanicus** Thaxt., Proceed. of the Amer. Acad. 3333 vol. XLI, n. 11 (1905) pag. 307, Monogr. Laboulb. II, pag. 266, t. 42, f. 37-38.

Hab. ad elytra *Laccophili* sp. in insula Java. — Long. totalis ad peritheci apicem 165-185 μ ., ad apicem processus receptaculi 180-200, latit. maxima 22-25 μ .; perithecia 90-110 ≈ 16 ; receptaculi pars basalis 75 μ . long., incluso pediculo.

MONOICOMYCES Thaxt. — Syll. XI p. 675, XVII p. 915.

1. **Monoicomycetes similis** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3334 n. 11 (1905) p. 305, Monogr. Laboulb. II p. 269, t. 35, f. 1-2.

Hab. in abdomine *Homalotæ*, speciem *Lactarii vexantis*, Maine Amer. bor. — Long. total. usque ad apicem peritheci 150-200; perithecia 90-110 ≈ 30 , cellula pedicelli 35-46; sporidia 35 ≈ 4 .

2. **Monoicomycetes Leptochiri** Thax., Proceed. of the Amer. Acad. 3335 vol. XLI, n. 11 (1905) p. 304, Monogr. Laboulb. II, p. 272, t. 34, fig. 39-40.

Hab. in toto corpore *Leptochiri* unicoloris, *L. javanici* et *L. minuti* in insula Java. — Long. total. ad apicem peritheci 250-800 μ .; axis 18-20 μ . diam.; perithecia 70-90 ≈ 18 -25; appendices longiores 50 μ .

EUCANTHAROMYCES Thaxt., Syll. XI p. 446, XIV p. 726, XVI p. 676.

1. **Eucantharomyces madagascarensis** Thaxt., Proceed. of the Amer. 3336 Acad. vol. XLI, n. 11 (1905) p. 306, Monogr. Laboulb. II, p. 278, t. 38, f. 24-26.

Hab. in elytris *Callidæ*, Madagascar. — Perithecia, inclusa cellula basali, 385 ≈ 60 -70; cellula pedicelli 275-290 ≈ 40 -45; receptaculum 165 ≈ 35 -45; antheridia 130-150 ≈ 30 -35, cellula basali 75 μ . long.; sporidia 60 ≈ 4 .

CLEIDIOMYCES Thaxt., Monogr. Laboulb. II (1908) p. 281 (Etym.

kleidion clavicula), *Monoicomycetes* Thaxt. p. p. olim et in Syll. — Receptaculum constans e binis cellulis superpositis; cellula basalis typice processus duo peculiare exerens, subbasalis appendices an-

theridiales et perithecia proferens. Appendix constans e cellula stipitis binisque cellulis superpositis cum quibus antheridium minutum compositum est sociatum, appendix desinens in extremitatem liberam cellularem supra antheridium. Perithecium stipitatum illo *Monoicomycetis* simile. — Ad hoc genus spectat:

1. *Cleidiomyces furcillatus* Thaxt. l. c. p. 281, t. 37, f. 3-4. Cfr. 3337 Syll. XVI p. 675.

HERPOMYCES Thaxt. — Syll. XVIII p. 915.

1. *Herpomyces Platyzosteriæ* Thaxt., Proceed. of the Amer. Acad. 3338 vol. XLI, n. 11 (1905) p. 310, Monogr. Laboulb. II, pag. 286, t. 39, f. 3-4.

Hab. in antennis *Platyzosteriæ ingentis*, Mexico. — Mas: long. totalis usque ad apicem antheridii 40 μ . Femina: long. tot. usque ad apicem processus subterminalis 160-225 μ .; perithecia 150 \approx 33; ejus processus terminalis 10 \approx 3,5.

2. *Herpomyces Phyllodromiæ* Thaxt., Proceed. of the Amer. Acad. 3339 vol. XLI, n. 11 (1905) p. 310, Monogr. Laboulb. II, pag. 288, t. 39, f. 1-2.

Hab. in antennis *Phyllodromiæ* in Abyssinia. — Mas: long. total. 30 μ . Femina: receptaculum primum 25 μ . long., secundarium 20 \approx 10; perith. usque ad apicem processus 80-100 \approx 15-20.

3. *Herpomyces Anaplectæ* Thaxt., Proceed. of the Amer. Acad. 3340 vol. XLI, n. 11 (1905) p. 309, Monogr. Laboulb. II, pag. 289, t. XXXIX, f. 9-10.

Hab. in antennis *Anaplectæ* spec. *A. Dohrinanæ* affinis pr. Caracas Venezuelæ (BLAKESLEE). — Mas: long. total. incl. antheridio 32-50 μ .; antheridia 24 \approx 2. Femina: receptaculum primum 25 \approx 3, secundarium 16 \approx 13; perithecia 80-90 \approx 16; sporidia 18 \approx 2.

4. *Herpomyces Nyctoboræ* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3341 n. 11 (1905) p. 309, Monogr. Laboulb. p. 292, t. 39, f. 5-8.

Hab. in antennis *Nyctoboræ latipennis*, Texas Amer. bor. — Mas: axis 54 \approx 10; long. total. usque ad apicem antheridii 100 μ .; antheridia 20 \approx 3. Femina: receptaculum secundarium 65 \approx 45-50; basis et cellula pedicelli peritheci 30-35 \approx 15-18, pars asci-gera usque ad apicem spinæ 150-165 \approx 20-25; spina externa 50 μ ., terminalis 12 μ . long.

SMERINGOMYCES Thaxt. Monogr. Laboulb. II (1908) p. 296 (Etym. *smerinx*, *smeringos* funiculus), *Rhacomyses* Thaxt. p. p. olim et in Syll. — Individua? mascula setiformia e multis cellulis superpositis. Individua? feminea: receptaculum constans ex 3-4 cellulis superpositis, perithecium unicum apice gerentibus; cellula subbasali appendice setiformi suffulta, cellula superior in similem apicem desinens. Perithecium appendiculatum, cavitas ejus cum cellula stipitis continua. — Ad hoc genus spectat:

1. *Smeringomyces anomalus* Thaxt. l. c. p. 297, t. 42, f. 41-42. 3342

ACOMPSOMYCES Thaxt. — Syll. XVI p. 692, XVII p. 917.

1. *Acompsomyces brunneolus* Thaxter, Proceed. Amer. Ac. Arts a. 3342*
Sc. XLI (1905) p. 311, Monogr. Lab. II, p. 298, t. 62, f. 10-12.

Hab. in elytris *Corticariæ*, Maine Amer. bor. — Long. tot. 125 μ .; perithecia 80 \times 20; cellula stipitis 12 \times 10; receptaculum 28 \times 12; appendices usque ad spinæ apicem 45 \times 10, cellula basalis 10 μ . longa.

STIGMATOMYCES H. Karst. — Syll. VIII p. 912, XIV p. 729, XVI p. 680.

1. *Stigmatomyces Venezuelæ* Thaxt., Proceed. of the Amer. Acad. 3343
vol. XLI, n. 11 (1905) p. 314, Monogr. Laboulb. II, pag. 304,
t. 49, f. 20-21.

Hab. in abdomine *Limosinæ* in ins. Margarita, Venezuelæ (BLAKESLEE). — Perithecia 95 \times 30; receptaculum 90 \times 14; appendices 45 μ . long., cellula pedicelli 22 μ . longa.

2. *Stigmatomyces pauperculus* Thaxt., Proceed. of the Amer. Acad. 3344
vol. XLI, n. 11 (1905) p. 313, Monogr. Laboulb. II, p. 306, t. 49,
f. 18-19.

Hab. in artubus *Muscæ* sp. cujusdam, Ralum, Nova Pomerania Oceanicæ. — Long. tot. usque ad apicem perithecii 165-175 μ .; perithecium 40-45 \times 35-38, rostellum 50 \times 16; appendices, inclusa cell. basali, 58-65 \times 15; sporidia 32 \times 3.

3. *Stigmatomyces micrandrus* Thaxt., Proceed. of the Amer. Acad. 3345
vol. XLI, n. 11 (1905) p. 312, Monogr. Laboulb. II, pag. 306,
t. 47, f. 19-24.

Hab. in abdomine *Muscæ* cujusdam, Ralum, Nova Pomerania Oceanicæ. — Long. total. 275-325 μ .; receptaculum 90-110 \times 90; perithecium 72-80 \times 50-60, rostellum 140-150 \times 16-18; appendices 35-40 μ . long., cellula pedicelli 20 μ . long.; sporidia 45 \times 4.

4. **Stigmatomyces Elachipteræ** Thaxt., Proceed. of the Amer. Acad. 3346
vol. XLI, n. 11 (1905) p. 311, Monogr. Laboulb. II, p. 308, t. 46,
f. 5-10.

Hab. in *Elachiptera longula*, New Hampshire Amer.
bor. — Perithecia 55-65 \times 30; rostellum 50 \times 16-20 appendices
80-90 μ . long., cellula stipitis 15-20 μ . long.; receptaculum 65 \times
18; sporidia 40 \times 3.5.

5. **Stigmatomyces Sarcophagæ** Thaxt., Proceed. of the Amer. Acad. 3347
vol. XLI, n. 11 (1905) p. 313, Monogr. Laboulb. II, p. 309, t. 49,
f. 14-17.

Hab. in abdomine *Sarcophagæ* sp. in ins. Margarita Vene-
zuelæ (BLAKESLEE). — Long. total. 600 μ .; receptaculum 200-
325 \times 30; perithecia 75-90 \times 35-42, ejus rostrum 150 \times 18-22; ap-
pendices usque ad curvaturam 110 μ . long.; cellula pedicelli 35
 μ . longa, cell. basalis 18-20 μ .; sporidia 35 \times 4.

SYMPLECTROMYCES Thaxt. Monogr. Laboulb. II (1908) p. 314 (Etym.
syn simul, *plectron* calcar), *Teratomyces* Thaxt. p. p. olim et in
Syll. — Receptaculum constans ex 3-4 cellulis superpositis, ex-
tima irregulariter prolifera; proliferationes orientes e cellulis nu-
merosis appendiculatis v. ramis brevibus appendiculatis, qui basim
perithecii plus v. minus complete amplectuntur. Appendices fer-
tiles v. steriles, postremæ simplices, cylindricæ sæpe in cellulam
rostratam desinentes; fertiles constantes e multis cellulis super-
positis e quibus pleræque ut antheridia funguntur, brevi processu
dentiformi dehiscentia. — Ad hoc genus spectat:

1. **Symplectromyces vulgaris** Thaxt. l. c., p. 315, t. 50, f. 14-16. 3348

LABOULBENIA Mont. et Rob. — Syll. VIII p. 909, IX p. 1132, XI
p. 450, XIV p. 730, XVI p. 682, XVII p. 918.

1. **Laboulbenia atlantica** Thaxt., Monogr. Laboulb. II (1808) p. 336, 3349
t. LII, f. 16-17.

Hab. in elytris *Lathrobii* multipunctati et *Gargi*
Schaumii in insula Madera. — Receptaculum 110 μ .; maxima
lat. 58 μ .; appendices longiores 380 μ .; perithecia 90 \times 70.

2. **Laboulbenia bilabiata** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3350
n. 11 (1905) p. 315, Monogr. Laboulb. II, p. 352, t. 55, f. 9.

Hab. in *Brachino armigero* in Capite Bonæ Spei Afr. —
Long. tot. 450 \times 115, appendices 200-300 μ . long.; receptaculum

225-250; perithecia 240 \approx 75, incluso processu terminali, qui 25 \approx 22 metitur.

3. *Laboulbenia Rougetii* Rob. et Mont. — Syll. VIII, p. 910, XIV, 8851 p. 734. — var. *japanensis* Thaxt., Monogr. Laboulb. II, p. 352, t. 55, f. 7.

Hab. in *Brachini* sp. in Japonia. — Longit. tot. usque ad apicem perithecii 700 μ . A typo præcipue distincta var. appendicibus obtusis, extus curvatis, brevioribus etc. — var. *sinensis* Thaxt., l. c. pag. 352, t. 55, f. 8. — In *Brachino sinensi*, China. — Long. tot. usque ad apicem perithecii 450 μ .; appendices pluries divisæ, divaricatæ, usque ad 450 μ . longæ.

4. *Laboulbenia olivacea* Thaxt., Proceed. of the Amer. Acad. v. XLI, 8852 n. 11, 1905, p. 315, Monogr. Laboulb. II, p. 360, t. 55, f. 3.

Hab. in artubus et abdomine *Lebiæ* sp. in insula Java. — Long. tot. usque ad apicem perithecii 185-220 \approx 40-48; perithecia 80-100 \approx 32-40; receptaculum 90 μ . long.; appendices 75-110 μ . long.

5. *Laboulbenia pusilla* Thaxt., Proceed. of the Amer. Acad. v. XLI, 8853 n. 11 (1905) p. 316, Monogr., Laboulb. II, p. 365, t. 65, f. 6.

Hab. in parte inferiore *Brachini scotomedis* in Japonia. — Long. totalis usque ad apicem perithecii 200-210 μ .; appendices 100-110 μ . long.; receptaculum 100-110 μ . long.; perithecia 90 \approx 36-40; sporidia 45 \approx 5.

6. *Laboulbenia Lebiæ* Thaxt., Monogr. Laboulb. II, p. 371, t. 61, 8854 f. 3-4.

Hab. in artubus *Lebiæ* sp. in insula Java. — Perithecia 165 \approx 50; appendices longiores 125 μ .; receptaculum 300 \approx 60; longit. totalis 500 μ .

7. *Laboulbenia subpunctata* Thaxt., Monogr. Laboulb. II, p. 394, t. 64, 8855 f. 5-6.

Hab. in prothorace et capite *Galeritæ* spp. Argentina, Brasilia; in *Galerita carbonaria* et *G. unicolore* in Amazonia Bras. — Long. tot. usque ad apicem perithecii 400-450 μ .; maxima lat. 70 μ .; perithecia, incluso pedicello, 200 \approx 40; appendices 125-150 μ . long., rami longiores 120 μ .; sporidia 44 \approx 5.

8. *Laboulbenia bicolor* Thaxt., Monogr. Laboulb. II, p. 398, t. 62, 8856 f. 13-15.

Hab. in artubus *Galeritæ* spec. Venezuela et (forma major) *Galeritæ carbonariæ* in Brasilia. — Long. tot. usque ad apicem perithecii 275-300; receptaculum 100-125 \approx 35-40; perithecia sine pedicello 125-150 \approx 18-32; appendices 125-150;

sporidia 50×5 . In forma majore dimensiones circ. quarta parte majores.

9. *Laboulbenia Ozenæ* Thaxt., Monogr. Laboulb. II, p. 403, t. 63, 3357 f. 11.

Hab. in *Ozæna angulicolli*, Venezuela. — Long. tot. usque ad apicem peritheci 220 , maxima lat. 60μ .; receptaculum 150μ . long.; perithecia $90-100 \times 30-33$; sporidia 55×5 ; antheridia 36μ . long.

10. *Laboulbenia texana* Thaxt., Monogr. Laboulb. II, p. 404. — Syll. 3358 XI, p. 453, XIV p. 734. — var. *oaxacana* Thaxt., l. c. p. 405, t. 63, f. 7.

Hab. in prothorace *Brachini lateralis*, Oaxaca Mexici. — Long. tot. 550μ .; perithecia 200×85 ; appendices 400μ . long.; receptaculum 470μ .; sporidia 60×5 . — var. *retusa* Thaxt. l. c. p. 406, t. 63, f. 6. — In prothorace et artubus *Brachini* sp. in Florida et Argentina. — Tot. longit. usque ad apicem peritheci $200-300 \mu$.; receptaculum $275-360 \mu$. long.; appendices $180-280 \mu$. long.; perithecia 150×60 ; sporidia $70 \times 5,5$.

11. *Laboulbenia pallescens* Thaxt., Proceed. of the Amer. Acad. 3359 vol. XLI, n. 11 (1905) p. 318, Monogr. Laboulb. II, p. 407, t. 61, f. 9-10. — Ita vocanda *Lab. pallida* Thaxt. (1902). — Syll. XVI, p. 687, non Thaxt. (1899) — Syll. XVII, p. 922.

12. *Laboulbenia chætophora* Thaxt., Proceed. of the Amer. Acad. 3360 vol. XLI, n. 11 (1905) p. 317, Monogr. Laboulb. II, pag. 412, t. 67, f. 19.

Hab. in abdomine *Dintutis solitarii*, Madagascar? et *Gyrini* sp. in America boreali. — Long. total. usque ad apicem peritheci 800×185 ; receptaculum 525μ . long.; perithecia 380×10 , spinulæ longiores 40μ .

13. *Laboulbenia rotundata* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3361 n. 11 (1905) p. 317, Monogr. Laboulb. II, p. 418, t. 41, f. 16.

Hab. in corpore *Dineutis spinosi* in insula Java. — Tot. long. usque ad apicem peritheci 450μ . long.; receptaculum 360μ . long.; perithecia 185×65 , exclusa cellula marginali quæ 18μ . lata.

14. *Laboulbenia chilensis* Speg., Fungi Chilenses (1910) p. 133 cum 3362 icon. — Tota fumoso-olivascens $150-200 \mu$. alta; cellulis 7 receptaculi normalibus; perithecio ellipsoideo erecto, ostiolo umbonato normali nigro collariato ornato; cellulis apicalibus distantioribus nigris, paraphysi unica crassa perithecio paullo longiore; ramulo antheridiali brevi, antheridiis duobus ornato.

Hab. in elytris *Bembidii*, Quinta Normal de Santiago Chile Amer. austr.

15. *Laboulbenia sigmoidea* Speg., Fungi Chilenses (1910) p. 134, cum 3363 icon. — Tota subhyalina v. pallide mellea, sigmoidea 300-500 μ . alta; cellulis 5 receptaculi normalibus, sexta et septima minimis; perithecio subhorizontali, dorsi parte distantiori subhemisphærica gibbose adnata, ostiolo subnormali nigro-torquato seu anulo nigro; paraphysibus 1 v. 2 crassis simplicibus v. bifidis; ramulo antheridifero brevi sæpius mox evanescente, antheridiis 4 ornato.

Hab. in prothorace *Argutoridii*, Quinta Normal de Santiago de Chile America austr.

16. *Laboulbenia marina* Picard, C. R. Soc. Biol. Paris LXV (1908) 3364 pag. 484, 2 fig. — Tota pallide flava, 150 μ . longa; receptaculo cylindraceo tricellulari, basi cellula minuta nigra pedicellari aucto, sursum ramulum lateralem brevem appendiciferum, nec non perithecium singulum exerente; appendicibus, cellula nigra depressa fultis, suboctonis, 3-4-cellularibus, fasciculatis, 30-38 μ . longis; perithecio fusoides-conico, 76 μ . longo, diaphano, sublibero; sporidiis fusoides, 26 μ . long., bicellularibus, cellula inferiore multo minore subtriangulari vix 4-5 μ . longa.

Hab. in elytris et pilis *Æpodis* Robini (insecti carabidei) in rimis saxorum graniticorum ab alga *Laminaria obduratorum* in insula Tatihon in Gallia.

RHACOMYCES Thaxt. — Syll. XI, p. 454, XIV p. 735, XVI p. 690, XVII p. 917.

1. *Rhacomycetes Aphænopsis* Thaxt., Proceed. of the Amer. Acad. 3365 vol. XLI, n. 11 (1905, p. 314, Monogr. Laboulb. p. 322, t. 45, f. 12-14.

Hab. in elytris *Aphænopsis cerberi*, Ariège Galliæ. — Receptaculum 75-165 \times 15-18; perithecium (non perfecte maturum) 85 \times 25; appendices longiores 300-350 μ .

2. *Rhacomycetes javanicus* Thaxt., Proceed. of the Amer. Acad. 3366 vol. XLI, n. 11, (1905) p. 314, Monogr. Laboulb. II, pag. 426, t. 45, f. 1-2.

Hab. in artubus minuti Coleopteri (*Harpaloidei*?), Buitenzorg ins. Javæ. — Long. total. 350-460 μ ; receptaculum 275-350 \times 18; perithecia 95-110 \times 35-40; appendices longiores 90-100 μ .

HYDROPHILOMYCES Thaxt., Monogr. Laboulb. II (1908) pag. 431 (Etym. *hydor* aqua et *philos* amicus), *Ceratomyces* Thaxt. p. p. olim et in Syll. XVI, p. 693. — Receptaculum constans e serie indeterminate cellularum superpositarum; cellulæ divisionis intercalaris et subinde quoque longitudinalis ope indefinite multiplicatæ. Axis appendicum illi receptaculi similis et cum eo continuus, exerens binas series ramorum e cellulis minutis oriundorum, e quibus cellulis inferiores in cellulas antheridiales cuspidatas mutantur. Perithécia e cellulis determinatis, paucis constantia. — Ad hoc genus spectant:

1. *Hydrophilomyces rhynchophorus* Thaxt., l. c. t. 68, f. 1-4. 3367
2. *Hydrophilomyces reflexus* Thaxt., l. c. p. 432, t. 69, f. 3. 3368

RHYNCHOPHOROMYCES Thaxt., Monogr. Laboulb. II (1908) p. 432 (Etym. *rhynchos* rostrum et *phoreo* fero), *Ceratomyces* Thaxt., p. p. olim et Syll. XVI, p. 694. — Receptaculum indeterminatum, constans e plurimis cellulis superpositis apice in perithecium desinentibus. Perithecium ventre et collo distinctis præditum, contentu indefinite multicellulari. Appendicis basis a ventre non distincta. Antherozoidia apice et lateraliter protrusa plerumque e cellulis ramulorum et appendicis. — Ad hoc genus spectant:

1. *Rhynchophoromyces elephantinus* Thaxt., l. c. p. 433, t. 68, f. 5. 3369
2. *Rhynchophoromyces denticulatus* Thaxt., l. c. p. 432, t. 70, f. 1. 3370

AUTOICOMYCES Thaxt., Monogr. Laboulb. II, p. 434 (1908) (Etym. *autos* idem, *oicia* domus et *myces*), *Ceratomyces* Thaxt. p. p. — Receptaculum e cellulis tribus superpositis constans; ima cellula sæpe in pedicellum atratum abiens, supra cellulas binas gerens, quarum altera perithecium singulum, altera appendicem antheridiale gerit; appendix antheridialis constans e cellulis seriatis extus irregulariter ramigeris; — Huc spectant *Autoic. acuminatus* Thaxt. l. c., *Autoic. ornithocephalus* Thaxt. l. c. jam ad *Ceratomycetem* relati. Cfr. Syll. XVI, p. 693.

1. *Autoicomycetes falcifer* Thaxt. Monogr. Laboulb. II, p. 435, t. 71, 3371 f. 18, *Ceratomyces falcifer* Thaxt., Proceed. of the Amer. Acad. vol. XLI, n. 11 (1905) p. 318. — Charact. generis.

Hab. in abdomine *Berosi* sp. in ins. Java. — Long. tot. usque ad apicem peritheci 250 μ .; perithecium 125-150 μ 55-65, appen-

dices 435-470 \approx 22; receptaculum 90-110 \approx 35, append. 110-125 μ . long.; sporidia 55 \approx 4.

CERATOMYCES Thaxt. — Syll. XI p. 455, XIV p. 736, XVI p. 693.

1. *Ceratomyces ansatus* Thaxt., Monogr. Laboulb. II, p. 439, t. 69, 3372 f. 4-5.

Hab. in *Tropisterni* sp. in Brasilia et Trop. striolato in Florida. — Long. totalis ad apicem peritheci 425-475 μ .; perithecia 325-350 \approx 75-80, appendices 220 \approx 36; receptaculum ad apicem processuum, incluso pediculo, 175-200 μ . long.

COREOMYCES Thaxt. — Syll. XVII p. 924.

1. *Coreomyces curvatus* Thaxt. Proceed. of the Amer. Acad. v. XLI, 3373 n. 11 (1905) p. 318, Monogr. Laboulb. II, p. 443, t. 71, f. 7-15.

Hab. in elytris *Corisiæ* sp. pr. Cambridge Mass. Amer. bor. — Long. total. 350-360 μ .; perithecia 130-140 \approx 36; cellula stipitis 70 \approx 25; appendices 125 μ . long.; sporidia 55 \approx 4.

TRENAMEYCES Chatton et Picard, Bull. Soc. Entom. Fr. XXV (1909)

p. 155 (Etym. *treno*, vox corrupta a *traho* et *myces*). — Dioicus; individua utriusque sexus linearia quadricellularia; cellulae basales, subbasales et duæ terminales steriles; organa reproductionis e cellula subbasali oriunda et supra cellulam basalem plus minusve inflatam inserta, in series lineares radiantes disposita; juvenilia ab axe distantiora. Antheridia composita ex una cellula pediculari et super hanc ex stratis binis cellularum intermediarum et antheridialium, postremis per collum evacuantibus. Perithecia juvenilia trichogynium laterale, subapicale gerentia; perithecia fecundata ex cellula ascogena unica, ascos biseriales alternos tetrasporos ferente, formata. Sporidia biseptata.

1. *Trenomycetes histophorus* Chatt. et Pic., Bull. Soc. Entom. Fr. 3374 XXX (1909) pag. 156 cum icon. et tab. VII, Trinchieri in Boll. Soc. Nat. Napoli, vol. 24 (1910) p. 1-7, extr. — Characteres generis; totus fungus achrous; cellula basali sphaerica ampla matricem perforante et deorsum in bulbum bulbillos quaternos ferentem inflata; cellula subbasali abortiva cellulis terminalibus sterilibus cibriiformibus apice acuminatis, appendicibus sterilibus; antheridiis pedunculatis amphoriformibus ex cellulis quatuor intermediis et septem antheridialibus formatis; peritheciis junioribus

initio clavatis demum elongato-fusoideis per collum papillis quaternis cinctum dehiscentibus; sporidiis lanceolatis biseptatis, cellula altera majore et altera minore insertioni apta.

Hab. in corpore Pediculorum Mallophagorum, Menopi et Goniocotis abdominalis, Banyuls-sur-Mer Gallie et Menopi pallidi, Neapoli (E. ARMENANTE).

PYRENOMYCETÆ Fr. em.

Syll. I p. 1, IX p. 364, XI p. 252, XIV p. 462, XVI p. 398,
XVII p. 524.

Fam. 1. Perisporiaceæ Fr. (*)

Trib. 1. Erysipheæ Lév.

SPHÆROTHECA Lév. — Syll. I p. 3, IX p. 364, XIV p. 462, XVI p. 402, XVII p. 524.

1. *Sphærotheca spiralis* Neger, Centralbl. f. Bakter. etc. II, Abt. 3375 XX (1907) p. 93. — Mycelio et conidiis albis in foliis et ramis evolutis; peritheciis plerumque cauliculis, globosis, 75 μ . c. cr., atro-brunneis; appendicibus albis spiraliter contortis, simplicibus, continuis; ascis solitariis, globosis, 60 μ . c. diam.; sporidiis 8 in quoque asco, ellipsoideis, hyalinis, 17-20 μ . long.

Hab. in foliis caulibusque Escalloniæ rubræ prope Lago argentino ad marginem fageti, Patagonia, Argentina America austr. (P. DUSÉN).

2. *Sphærotheca mors-uvæ* (Schw.) Berk. Syll. I, p. 5. — var. *japonica* Salm., Ann. Mycol. VI (1908) p. 2. — A typo differt peritheciis et ascis minoribus, nempe primis 68-85 μ . diam., postremis 55-70 v 38-45.

Hab. in caule foliisque Stephandiandræ flexuosæ, Morioka Japoniæ (K. OKAMURA).

3. *Sphærotheca Castagnei* Lév. — Syll. I p. 4. — forma *Alchemillæ* 3377 Stein, Centralbl. f. Bakter. etc. II Abt., XXI (1908) p. 733. — Characteribus præcipue biologicis distincta.

Hab. in Alchemillarum sp. diversis in Helvetia. Teste cl.

(*) Cfr. F. Theissen, *Perisporiales riograndenses*. S. Fiel (in Broteria IX, 1910) aliæque recentiores commentationes et quoad biologiam Erysiphearum cfr. G. M. Reed, *Infection experiments with Erysiphe Cichoracearum* etc. Madison 1908 et *The Mildews of Cereals*. Columbia Mo, 1909.

Stein l. c. species ob notas biologicas etiam in alias formas dividenda. — forma *Euphorbiæ-dulcis* Ferraris, Ann. R. Ist. bot. Roma IX; fasc. 3 (1902) pag. 216: a typo differt mycelio nunc anulos brunneos perithecia limitantes efformante, nunc maculas brunneo-tomentosus sistente. — In foliis caulibusque *Euphorbiæ dulcis*, Oropa in Pedemontio Italiæ bor. (CESARI).

4. *Sphærotheca fuliginea* (Schlecht.) Pollacci, Erysiph. ital. in Atti 3378 R. Ist. Bot. Pavia ser. II, v. IX (1905) p. 8 (extr.). — Ita vocanda *Sphærotheca Humuli* var. *fuliginea* (Schl.) Salmon Monogr. Erys. p. 49, seu *Sph. dentosa* Kicks — Syll. I, p. 4.

CYSTOTHECA B. et C. — Syll. I p. 72, XVI p. 407. — De hoc genere cfr. Saccardo in Ann. mycol. (1911) p. 250, ubi contendimus genus hoc ob endothecium ex integro a perithecio secedens et cum asco se liberans, distinguendum esse a *Sphærotheca*.

1. *Cystotheca lanestris* (Harkn.) Sacc. in Ann. mycol. l. c. — Ita 3379 vocanda *Sphærotheca lanestris* Harkn. — Syll. IX, p. 364.

PHYLLACTINIA Lév. — Syll. I p. 5, IX p. 366, XVI p. 398, XVII p. 524.

1. *Phyllactinia suffulta* (Reb.) Sacc. — Syll. I, p. 5. — var. *angulata* 3380 Salmon, Ann. Myc. v. III (1905) p. 500, tab. XIV, fig. 1^a15. — A typo differt conidio crasso ambitu plus minusve angulari nunc subquadrato-vel oblongo-rectangulari, nunc rectangulari-cylindrico, sæpe medio constricto, uno apice v. utrinque rotundato v. truncato vel obtuse apiculato, 45-60 × 15-26 raro ad 85 µ. longo.

Hab. in foliis vivis *Quercus Kelloggii*, *Q. macrocarpæ*, *Q. aquaticæ*, *Q. coccineæ*, *Q. discoloris*, *Q. palustris*, *Q. rubræ*, *Castaneæ sativæ*, *Fagi ferrugineæ*, et *Ulmi alatæ*, in Americæ bor. pluribus locis, in foliis vivis *Adesmiæ* sp. in Argentina (SPEGGAZZINI), in foliis vivis *Hippophaës rhamnoidis* in Europa. — Var. *rigida* Salmon, l. c. p. 500, tab. XV, fig. 2: a typo differt conidiophoro rigido elongato setiformi ad 500 µ. longo, circ. 5 µ. lato, fere ad apicem parietibus incrassatis. — In foliis in Mexico (FARLOW) et Guatimala (SEEMAN). — Var. *subspiralis* Salmon, l. c. p. 501, tab. XV, fig. 3: a typo differt conidiophoro in parte inferiore subspirali. — In foliis vivis *Dalbergiæ Sissoo*, Poona Indiæ orient. (G. MARSHALL WOODROW) et Dehra Dun (E. J. BUTLER).

UNCINULA Lév. — Syll. I p. 6, IX p. 366, XI p. 252, XIV p. 462, XVI p. 399, XVII p. 524.

1. *Uncinula simulans* Salm., Ann. Mycol. VI (1908) pag. 2. — Am- 3381
phigena; mycelio fugaci; peritheciis sparsis, globoso-depressis, 90-120 μ . diam.; appendicibus 15-30, peritheci diameter paullo v. duplo superantibus, plerumque v. in eodem perithecio inæqualibus, gracilibus, basim versus c. 5 μ . cr. sursum tenuatis, continuis, ad apicem rubro-fuscis simpliciter uncinatis; ascis oblongo-ovoideis, breviter pedicellatis, 60-70 \approx 35-45; sporidiis oblongis 4-6, maturitate granulato-obscuris, 18-20 \approx 10-12.

Hab. in foliis Rosæ multifloræ, Morioka Japoniæ (K. O. KUMURA). — Species formosa appendicibus gracilibus continuis læte coloratis distinctissima.

2. *Uncinula australiana* Mc Alpine, in Journ. Linn. Soc. N. S. Wa- 3382
les, XXIV (1899) p. 302, t. 23, f. 5-9, Salmon, Monogr. Erysiph. p. 118, t. V, f. 94, 95. — Amphigena; mycelio persistente; peritheciis pro more gregariis, subinde sparsis, 90-140 μ . diam., cellulis contextus 10-15 μ . diam.; appendiculis 7-20, pro more 12, peritheci diameter subæquantibus, 1-septatis, basi plus minus saturate brunneis, simplicibus, levibus, tenui-tunicatis, sursum vix dilatatis, circ. 5 μ . diam., apice typice helicoidæ; ascis in quoque perithecio 3-5, late ovatis v. subglobosis, interdum brevissime stipitatis, 45-50 \approx 30-40; sporidiis 5-7, raro 8, ellipsoideis 20-22 \approx 10-12.

Hab. in foliis et inflorescentia Lagerstrœmiæ indicæ et L. ovalifoliæ, Sydney Australiæ et Sendai et Tokyo Japoniæ. — Inter *Unc. necatorem* et *Unc. Sengokui* fere media.

3. *Uncinula Prosopidis* Speg., An. Mus. Nac. Buenos Aires t. XIX 3383
(1909) p. 324. — Mycelio laxissimo ex hyphis tenuibus hyalinis 45 μ . cr., ramoso-intricatis septulatis constituto, amphigeno; peritheciis hinc inde laxè gregariis, sæpius epiphyllis, globulosis 150 μ . diam., atris carnosulo-membranaceis, contextu olivaceo indistincto vix pellucido, setulis radiantibus confertiusculis antice subattenuatis 50-120 \approx 5-6, apice obtusiusculis sæpe subincrassatulis, modice circinatis levibus continuis hyalinis ornatis; ascis 6-8 in quoque perithecio, ex ovato subellipsoideis aparaphysatis 50-70 \approx 25-30, sæpius bisporis; sporidiis elliptico-subcylindræis 35 \approx 14-15 utrinque obtusis rotundatis, continuis, sæpius grosse biguttulatis hyalinis.

Hab. ad folia viva Prosopidis campestris in Horto botanico bonaërensi, Argentina Amer. austr.

4. *Uncinula incrassata* Salm., Ann. Mycol. VI (1908) pag. 525. — 3884
 Amphigena; mycelio effuso persistente; peritheciis sparsis v. subgregariis parvulis, 100-140 μ . diam., globoso-depressis; appendicibus 60-120 in quoque perithecio, quoad longitudinem inæqualibus, perithecii diametrum dimidium æquantibus nunc integrum paullo superantibus, nunc intermediis, 6-7 μ . cr., ad apicem parietibus incrassatis, apice simpliciter strictimque uncinatis, continuis; ascis 3-7 (immaturis).

Hab. in foliis *Pterocarpi melliferi*, Gazaland Africae (C. F. M. SWYNNERTON) — *U. Tectonæ* affinis, sed appendicibus tunica incrassata et latoribus facile distincta.

5. *Uncinula Tectonæ* Salm., Ann. Mycol. V (1907) p. 479. — Epi- 3885
 phylla; mycelio tenui, effuso persistente; peritheciis subgregariis, hemisphaericis circ. 110 μ . diam., cellulis 10-15 μ . diam.; appendicibus numerosis usque ad 75-100, perithecii diam. subæquantibus, sæpe longitudine varia in quoque perithecio, tenuibus, hyalinis, continuis, subinde sursum crassius tunicatis, basi 5-6 μ . cr., superne 4 μ . cr. apice arcte uncinatis et interdum helicoidis; ascis 4-8 in quoque perithecio, late ovoideis, breviter distincte pedicellatis, 65-70 \times 38-40; sporidiis 6-8, rarius 4 conglobatis, circ. 25 \times 14.

Hab. in foliis *Tectonæ grandis*, Jubbulpore Indiae orient. — Species numero, longitudine et tenuitate appendicum distinguenda.

6. *Uncinula Nothofagi* Thaxter, Botan. Gazette L (1910) pag. 439, 3886
 tab. XIX, fig. 7-10. — Epiphylla v. rarius amphigena; peritheciis mycelio albido persistenti effuso insidentibus, dense congestis v. discretis, globoso-depressis, 80 μ . diam. (70-100 μ), rufo-brunneis, cellulis 10-12 μ . diam.; appendicibus 5-15, continuis, 70-100 μ . long., inferne rectis v. curvatis, rigidis, induratis, brunneo-suffusis; superne spiraliter arcte 4-8-convolutis, apice helicoido-subinflatibus, spiris basilaribus plus minus subfuscis, ceteris hyalinis; ascis late ovalibus, 5-8 in quoque perithecio, suboctosporis; sporidiis oblongo-ellipsoideis 18-20 \times 10; conidiis subcylindraceis 25-32 \times 10-15.

Hab. in foliis *Nothofagi antarcticæ* var. *bicrenatæ* a *Taphrina entomospora* occupatis v. rarius in foliis sanis, Punta Arenas Patagoniae Americae austr.

7. *Uncinula magellanica* Thaxter, Botan. Gazette 4 (1910) pag. 440, 3887
 tab. XIX, fig. 11-13. — Plerumque epiphylla; perithecio mycelio albido effuso exiguo insidentibus, discretis v. subgregariis, globoso-

depressis, opacis v. subopacis, atro-brunneis, 90-150 μ . diam. sed plerumque 130 μ ., cellulis 10-20 μ . latis; appendicibus 10-22, hyalinis, longis, tenuibus, curvatis v. subflexuosis, subrigidis, 225-400 \approx 5-6, apice subinflatis et subrecurvatis; ascis late clavatis, 55 \approx 25, plerumque 3-4-sporis, sporidiis 20 \approx 10-12, conidiis subcylindræis 35-40 \approx 15-18.

Hab. in foliis Nothofagi antarcticæ var. bicrenatæ, Taphrinâ magellanicâ obsessis, Punta Arenas Patagoniæ America austr.

8. *Uncinula Mori* Miyake, Botan. Mag. Tokyo XXI, n. 240 (1907) 3388 extr. p. 2, cum icon. — Mycelio tenui, septato 3,8-5 μ . cr., hinc inde haustoria lobulata generante, pelliculas alba subrotundas epiphyllas efformante; peritheciis minutis, nigris, hemisphæricis, 92-130 μ . diam., cellulis 10-17 μ . diam.; appendicibus 12-26, pro more 15-17, basi 5-6 μ . cr., lumine (ob tunicæ crassitiem) angustissimo, sursum multo latiore præditis et 7-8 μ . cr., apice summo tenuatis et simpliciter arcte uncinatis, 130-216 μ . longis; ascis quaternis, rarius ternis, ovato-ellipsoideis, brevissime pedicellatis, 50-60 \approx 40-50, tetra-pentasperis; sporidiis ellipsoideis, utrinque rotundatis, 27-35 \approx 15-19, granuloso-farctis, hyalinis.

Hab. in foliis Mori albæ in Japoniæ pluribus locis. — *Uncinulæ flexuosæ*, *Unc. geniculatæ* et *U. Miyabei* nonnullis notis affinis.

9. *Uncinula Pirottiana* Bacc., Funghi Eritrea, Ann. Bot. v. IV (1906) 3389 pag. 273; tav. X, fig. 2. — Hypophylla, mycelio tenui evanido; peritheciis minutis, atris, globosis μ . 84-90 latis, monoascis appendicibus numerosis continuis, perithecium æquantibus, hyalinis, ad apicem attenuatis, arcte circinatis; ascis tetra-hexasporis 68 \approx 48; sporidiis hyalinis ellipticis, 24 \approx 14.

Hab. in foliis Ficus sp., Valle Catalaben, Mensa Erythrææ Afr. (PAPP).

10. *Uncinula columbiana* Selby — Syll. XI, p. 252. — Nascitur in 3390 foliis Scutellarariæ laterifloræ, nec *Uncinulæ* v. *Unciniae* ut legitur l. c.

MICROSPHÆRA Lév. — Syll. I p. 10, IX p. 368, XI p. 252, XIV p. 463, XVI p. 402, XVII p. 525.

1. *Microsphæra Sophoræ* G. Gándara in Memorias y revista de la 3391 Sociedad científica A. Alzate, Mexico, XXVI, (1908) p. 234, t. I-II. — Mycelio epiphylllo, arachnoideo, effuso, persistente; peritheciis

globulosis, nigris, superficialibus, sparsis, reticulatis, 100-130 μ . diam.; ascis 3-6 in quoque perithecio, ovoideis, brevissime pedicellatis, 50-60 μ . long., 3-5-sporis; sporidiis ellipsoideis, intus granulosis, 15-20 \times 8-14; appendiculis 9-15, hyalinis, horizontalibus, inæqualibus, perithecio fere duplo longioribus, 3-6 vicibus dichotome ramosis, ramulis ultimis turgidis, divaricatis, apice acuminatis.

Hab. in foliis vivis *Sophoræ* sp. indet. in Schola Agriculturæ S. Jacinto, Mexico. — Auctor præterea describit sporulas ellipsoideas, hyalinas, nucleatas, numerosas, 2 \times 1,5, quæ verisimiliter, ut opinamur, *Cincinnobolo* pertinent.

2. *Microsphæra penicillata* (Wallr.) Lév. em. — Syll. I, p. 13. — 3392
ver. *pseudo-Loniceræ* Salm., Ann. Mycol. VI (1908) p. 4. — A typo differt appendicibus apice ter-quinques regulariter dichotomis, ramulis ultimis plerumque rectis.

Hab. in foliis *Sabiæ japonicæ*, Misato-mura, Tosa Japoniæ (T. YOSHINAGA). — Var. *Yamadai* Salm., l. c. pag. 3. — A typo differt appendicibus apice minus divisus plerumque ramis primis longis, ramulis ultimis sæpe plus minus contortis, maturitate laxè recurvis. — In foliis *Hoveniæ dulcis* et *Juglandis Sieboldianæ* in Japonia (YAMADA, KUSANO et OKAMURA). — Var. *ludens* Salmon, Monogr. Erysiph. p. 154, t. II, fig. 27-30 — A typo dignoscitur appendicibus flexuoso-contortis, apicibus variis, modo rectis, modo recurvatis. — In foliis *Viciæ americanæ*, Dakota, Wyoming et Montana Amer. bor.

ERYSIPHE Hedw. — Syll. I p. 15, IX p. 370, XI p. 253, XVI p. 404, XVII p. 526.

1. *Erysiphe Martii* Lév. — Syll. I, p. 18. — var. *Astragali* Sacc. in 3393
Potebnia, Trav. Soc. Nat. Univers. Kharkov t. XXXVIII (1907).
Appendicibus perithecio pluries longioribus.

Hab. in foliis *Astragali glycyphylli* pr. Kursk Rossia.

2. *Erysiphe taurica* Lév. — Syll. I, p. 16. — var. *Zygophylli* Maire 3394
in Bull. Soc. Sc. Nancy, sér. 3, VI (1905) p. 6, t. II f. 4-6 (extr.).
— A typo differt conidiis longe cylindræis, 57-72 \times 13-14.

Hab. in foliis *Zygophylli* Fabaginis in Asia minore.

3. *Erysiphe Ricini* Speschn., Monit. Jard. bot. Tiflis (1906) p. 14. — 3395
Mycelio epiphylo, raro hypophyllo, arachnoideo; hyphis hyalinis 6-9 μ . cr., haustoriis non lobulatis, minutis, spinuliformibus; conidiis facile dilabentibus, elongato-ovoideis v. cylindræis, 36-48 \times

10-16, verrucosis; peritheciis irregulariter disseminatis, semiimmersis, brunneis, 150-220 μ . diam., appendicibus brevibus, simpliciter furcatis, hyalinis, ramulis undulatis cum mycelio intertextis; ascis in singulo perithecio 17-25, piriformibus, in pedicellum protractis 60-70 \times 34-40, bisporis; sporidiis ellipsoideis, 26 \times 20, hyalinis.

Hab. in foliis Ricini communis, Eriwan Caucasi (A. ROLLOFF).

Trib. 2. Eurotieae Sacc.

EUROTIIUM Link — Syll. I p. 95, IX p. 37, XI p. 254, XVI p. 1123, XVII pag. 527. — De hoc genere cfr. MANGIN in Ann. Sc. nat. Bot. (1908) p. 351.

1. **Eurotium baculatum** (Westl.) Sacc. et Trott. *Penicillium baculatum* 3396 Westling in Svensk Bot. Tidskr. IV (1910) p. 140, f. 3. Status conidioph.: *Penicillium baculatum* Westl., l. c. f. 1-2 (Cfr. suo loco). — St. ascoph.: peritheciis globulosis, 100-250 μ . diam., flavis, pariete fragili, gracili instructis; ascis globosis v. ovoideis, hyalinis, suboctosporis; sporidiis lenticularibus, 5,2-6 μ . diam. e latere 4,2-4,8 μ . cr. margine subcanaliculatis.

Hab. in foliis aliquot plantarum in M. Åreskutan Jemtlandiae. — *Eurotii* gen. st. conidioph. est pro more *Aspergillus*; hinc ulterius inquirendum an huic speciei vere adscribenda sit species citati *Penicillii*.

2. **Eurotium Chevalieri** Mangin, Ann. Sc. Nat. IX ser. (1908) p. 361, 3397 cum icon. — Mycelio albo effuso floccoso, sæpe repente et margine fimbriato, dein ob conidia virescente; conidiophoris ut in *Aspergillo glauco*; conidiis sphaericis v. ovoideis verrucosis, 5,6-7,4 μ . diam.; peritheciis in mycelio nidulantibus, copiosis, minutis, sulphureis; ascosporis lenticularibus peripherice distincte et profunde sulcatis, 4-7 e latere 3,7 μ .

Hab. in substantiis organicis putrescentibus ex Algeria (CHEVALIER).

3. **Eurotium Amstelodami** Mangin, Ann. Sc. Nat. IX sér. pag. 360, 3398 cum icon. — Mycelio albo, effuso, subvelutino, dein ob conidia virescente margine flocculoso; conidiophoris cylindræis 150 μ . long., 10 μ . cr., apice subgloboso-verrucosis; sporophoris brevissimis paliformibus obtusis; conidiis catenulatis, sphaericis, tenuiter echinulatis, viridibus, 2,8-4,7 μ ; peritheciis in mycelio ni-

dulantibus, copiosis, minutis, sulphureis; sporidiis lenticularibus hyalinis, levibus, 4,7 e latere 3,7 μ ., peripherice distincte sulcatis.

Hab. in substantiis organicis putrescentibus in Gallia ex Hollandia. — Quoad characteres culturæ confer L. Mangin l. c.

4. *Eurotium fumigatum* (Grijns) Sacc. et Trott. *Aspergilli fumigati* 3399
st. ascoph. Grijns in Centralbl. Bakt. XI (1907) p. 331. — Peritheciis minutis, contextu bistratoso e cellulis prismaticis atrorubris formato, granulis virescentibus valde refringentibus consperso; ascis octosporis; sporidiis fusco-rubris, tæniola anulari æquatoriali (elaterium fungente) cinctis.

Hab. in decocto hordeaceo socio st. conidioph. *Aspergillo fumigato*, in Germania.

CRYPTOTHECIUM Penz. et Sacc. — Sacc. — Syll. XIV, p. 465. — Prof. Höhnelt (Fragm. z. Mykol. VIII, p. 23) contendit hoc genus ad *Byssonectriam* inter Hypocreaceas referendum esse. Hoc vero peritheciis minutissimis, in subiculo omnino peculiari a matrice libero nidulantibus præditum a Nectriaceis probe distinguitur.

SACCARDIA Cooke — Syll. I, p. 24, IX p. 37, XI p. 253.

1. *Saccardia Durantæ* Pat. — Syll. XI, p. 253. — var. *Rickii* Rehm, 3400
Ascom. exsicc. (1907) n. 1698, Ann. Myc. V (1907) pag. 83. — Peritheciis plerumque arcte congregatis, glabris, excipulo fusco-cæruleo tenuissime parenchymatico, ascos subsenos includentibus; ascis globosis dein ovoideis, crasse tunicatis, 20-30 \times 18, octosporis; sporidiis subelavatis, 3-septatis, 10-12 \times 5, hyalinis, una alterave cellula interdum longitudinaliter divisa; paraphysibus, nullis.

Hab. in pagina inf. foliorum Schini weimanniæfolii, Sao Leopoldo, Rio Grande do Sul Brasilæ (prof. Rick).

Trib. 3. Englerulaceæ P. Henn.

Syll. XVII, p. 529. — De hac familia cfr. v. Höhnelt Fragm. z. Myk. VII, in Sitzungsber. d. k. Akad. d. Wissensch. Wien, CXVIII, Abt. I, April 1909, pag. 318. Teste hoc auct. *Englerula Macaranga* P. Henn. esset Perisporiaceæ *Dimerio* affinis; e contra *Saccardomyces bactridicola* P. Henn. (a quo vix differret *S. socius* P. Henn.) esset *Ophionectriæ* proximus.

ENGLERULA P. Henn. — Syll. l. c.

1. *Englerula carnea* (Ell. et Mart.) v. Höhn. Fragm. z. Mykol. VII, 3401
p. 54. — Ita nuncupanda esset, teste Höhneltio, *Asterella carnea* (Ell. et M.) Sacc. — Syll. IX, p. 393.

SCHIFFNERULA v. Höhn., *Fragm. Mykol.* VII (1909) p. 55 (Etym. a doct. VICT. SCHIFFNER, professore vindobonensi). — Subiculum tenue arcte adnatum. Hyphæ pseudopodiis 1-cellularibus et conidiis sessilibus, septatis præditæ. Perithecia in hyphis pleurogena, fusca, irregulariter globosa, astoma, initio distincte cellulosa, dein histolysis ope subanhistata. Asci aparaphysati, ovoidei, pauci, octospori. Sporidia bicellularia, hyalina.

1. *Schiffnerula mirabilis* v. Höhn. l. c. p. 56. — Subiculo epiphylllo 3402 tenuissimo, 1-3 mm. lat., griseo-brunneo, interdum late confluyente, hyphis 6-8 μ . cr., griseo- v. violaceo-brunneis, hyphopodiis alternis, 10-14 \times 8 ovoideo-globosis, continuis præditis, ramulis brevibus, lateralibus; conidiis paucis sessilibus, falcatis, 4-cellularibus, brunneolis 40-42 \times 11-12; peritheciis copiosis initio brunneis dein hyalinis, lateralibus, sæpe concrecentibus, sessilibus v. breve pedicellatis, tuberculiformibus, 48-76 \times 44-55, astomis; ascis 1-3 in quoque perithecio, aparaphysatis, octosporis 24-36 \times 20-28, mucro obvolutis; sporidiis conglobatis, constricto-1-septatis, 19-24 \times 9-12, utrinque rotundatis, hyalinis.

Hab. in foliis *Passifloræ* spec. in silvis Depok ins. Javæ (V. SCHIFFNER).

2. *Schiffnerula secunda* v. Höhn., *Fragm. z. Mycol.* X (1910) p. 20. 3403 — Subiculo epiphylllo, minuto, subrotundo, nigricante, adnato, ex hyphis 6-8 μ . cr., brunneis, opposito-alterneque ramosis, reticulatisque; hyphopodiis copiosis ovoideis v. subglobosis, 1-cellularibus 11-12 \times 9-12; peritheciis copiosis, tuberculiformibus, subdepressis, 44-88 μ . lat., molliusculis, astomis, contextu unistratoso ex cellulis 8-10 μ . diam., extus prominentibus conflato; ascis aparaphysatis, 2-3 in quoque perithecio, ovoideo-globosis, 35-40 μ . diam., 8-sporis; sporidiis ellipsoideis, hyalinis, medio 1-septato-constrictulis, utrinque rotundatis, 22-29 \times 12-16.

Hab. in foliis *Compositæ* indet., Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

HYALODERMA Speg. — *Syll.* IX p. 437, XI p. 270, XIV. p. 465, XVI p. 406.

1. *Hyaloderma Afzelii* v. Keissl, *Ann. Mycol.* VII (1909) p. 291. — 3404 Epiphyllum, rarius hypophyllum; mycelio vix perspicuo; peritheciis numero 2-5 aggregatis (rarius singulis), magnis, c. 300-400 μ . diam., globulosis, atris; ascis numerosis, cylindraceutis, apice rotundatis, basim versus vix attenuatis, tenuissime tunicatis, c. 85-90 \times

12-15, octosporis, aparaphysatis; sporidiis acicularibus, flexuosis, eseptatis, eguttulatis, hyalinis, c. $80 \approx 1$.

Hab. in foliis vivis Afzeliae sp. in insula Salomon Bougainville (RECHINGER).

2. *Hyaloderma Gardeniae* v. Keissl., Ann. Mycol. VII (1909) p. 290. 3405

— Epiphyllum; mycelio vix perspicuo, inter hyphas Meliolæ crescente (an in eis parasitico?), brunneo, cellulis oblongis composito; peritheciis laxe gregariis, minutissimis, c. 80μ . diam., globosis, astomis, fatiscentibus, sordide violaceis; ascis paucis ellipticis, basim versus vix attenuatis, tenuiter tunicatis, 8-sporis (?) c. $25-30 \approx 7-9$; paraphysibus plerumque sparse ramosis, ascis fere duplo longioribus, $45-50 \approx 1$, hyalinis; sporidiis acicularibus, leviter curvatis, acutis, hyalinis, eseptatis, c. $20-22 \approx 1,5-2$.

Hab. ad folia viva Gardeniae Lanutoo, in consortio plagarum Meliolæ sp. (vel potius parasitans) in insula Samoa Upolu prope lacum Lanuanea (RECHINGER).

3. *Hyaloderma Winklerianum* P. Henn., Engl. Jahrb. XXXVII (1905) 3406

p. 125. — Peritheciis sparsis, v. subaggregatis, in mycelio Meliolæ parasiticis, subglobosis v. ovoideis, baud papillatis, albidis, $100-140 \mu$. diam., contextu subcelluloso, hyalino, setulis rigidis, erectis, hyalinis, subulatis, $50-80 \approx 4-5$, vestitis; hyphis repentibus effusis, septatis, ramosis, hyalinis circumdatis; conidiis fusioideis, $40-60 \approx 4-6$, pedicellatis, 4-guttatis, dein pluriseptatis, submuriformibus; ascis clavatis, apice crasse truncatis, obtusis, 8-sporis, $55-65 \approx 12-15$, paraphysibus filiformibus, hyalinis, $1,5 \mu$. cr.; sporidiis conglobatis longe fusioideis, rectis v. curvulis, utrinque acutis, 7-septatis, $35-40 \approx 4-4,5$, hyalinis.

Hab. in mycelio Meliolæ spec. ad folia Marantaceæ sp., Camerun Africae trop. (WINKLER).

4. *Hyaloderma Uredinis* Raciborski, Bull. Ac. Sc. Cracoviae (1909) 3417

p. 376. — Peritheciis hypophyllis confertis griseo-albis, globosis, vertice depressis, $100-150 \mu$. diam., astomis, appendiculis binis praeditis; cellulis contextus polygoniis, $3-8 \mu$. diam.; deorsum hyphis copiosis, tenuibus, ramosis inter uredosoros penetrantibus, sursum setulis hyalinis, $40-65 \approx 6$, levibus coronatis; ascis filiformi-paraphysatis, apice rotundatis, deorsum tenuatis, $80-90 \approx 12-16$, octosporis; sporidiis linearibus utrinque rotundatis, levibus, $55-62 \approx 3$, parallelis, 20-pluriseptatis, hyalinis.

Hab. in soris uredineis Sphaerophragmii Mucunæ ad folia Mucunæ sp. in insula Java.

HYALOTHELES Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 11 (Etym. *hyalos* vitrum et *thele* papillâ). — Perithecia pusilla, sparsa, subglobosa, astōma, anhistâ, thallo mucedineo insidentia. Asci clavati aparaphysati octospori; sporidia didyma, loculis globosis mox secedentibus coloratis. Genus pulchellum ad *Englerulas* etiam nutans.

1. **Hyalotheles dimerosperma** Spegazz., l. c., fig. c. — Maculis nullis; 3408
peritheciis hypophyllis sparsis, fuscis, tunica tenuissima præditis glabris, superne rotundatis inferne coarctato-applanatis, 50–80 μ . diam., substipitatis, thallo vix evolutō insidentibus; ascis 15–30 antice late rotundatis postice cuneatis breviter crasseque pedicellatis 20–30 \times 14–18; sporidiis polystichis e chlorino fuscis, 12 \times 6, loculo supero parum majore.

Hab. in foliis vivis Rubi urticifolii prope Casa do Isolamento, Sao Paulo Brasilia (USTERI).

DIMEROSPORIELLA Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908), p. 10 (Etym. a *Dimerosporio*, cui affinis). — Perithecia minuta ostiolata, anhistâ, subhyalina, thallo mucedineo insidentia, polyasca. Asci subcylindracei octospori paraphysati; sporidiis didymis hyalinis. — Est *Dimerosporium* thallo et peritheciis anhistis ostiolatis donatum, inter *Englerulas* adnumerandum. Gen. *Dimerosporiella* v. Höhn. Fragm. z. Myk VIII (1909) p. 22 est omnino diversum et continet *Pisomyxam Amomi* B. et C. — Syll. IX, p. 374. — a typo Cordaeano diversam et potius *Dimerosporio* et *Alinæ* affinem.

1. **Dimerosporiella paulistana** Spegazz., Fungi Paulist., Rev. Mus. La 3409
Plata t. XV, pag. 11, fig. B. — Maculis nullis v. vix pallescentibus; peritheciis hinc inde gregariis superficialibus pusillis, fusciculis, glabris, 80 \times 60 umbonato-ostiolatis, 6–12-ascis; ascis elliptico-cylindraceis antice obtuse rotundatis 50 \times 10, basi brevissime noduloseque pedicellatis; paraphysibus paucis longioribus filiformibus obvallatis; sporidiis distichis, levibus minutis, 14–16 \times 4, loculis æquilongis, supero obtuso, infero conoideo-acuto donatis, ad septum vix constrictis.

Hab. in foliis languidis Buddlejæ cujusdam, Moca Ipiranga Brasiliæ (USTERI).

Trib. 4. Perisporiæ Sacc.

Sect. 1. Hyalosporæ.

CEPHALOTHECA Fuck. — Syll. I p. 36, IX p. 377, XIV p. 465, XVI p. 407.

1. *Cephalotheca prolifica* (Bain.) Sacc. et Trott., *Gliocladium prolifi-* 3410
cum Bainier Bull. Soc. Mycol. Fr. (1910) p. 386 (st. ascophor.), t. XXVI, fig. 2-5. — Peritheciis ex mycelio *Gliocladii* orientibus, conglomeratis, sphaericis usque ad 1 mm. diam., astomis, grosse cellulosis, levibus, isabellinis; ascis pluribus, filamentis brevibus suffultis ovoideo-oblongis, sursum crassioribus, 8-sporis; sporidiis infra monostichis, apice distichis, sphaericis, 25-28 μ . diam. episporio minute verruculoso, intus 1-2-guttulatis.

Hab. in palea uda socio st. conidioph. *Gliocladio* prolifico in Gallia.

2. *Cephalotheca Kriegeri* Rehm, Ascom. exs. fasc. 44, n. 1850, Ann. 3411
Mycol. VII (1909) p. 405. — Peritheciis gregariis, globosis, glabris, nigris, poro pertusis, crasse parenchymaticis, cellulis magnis violaceo-fuscis contextis, 250 μ . diam., sessilibus, in mycelio hypharum ramosarum 2 μ . cr. ab aliis rectis 3-4 μ . cr. percursorum insertis; ascis ellipsoideis, 15-20 \times 8-9, in hyphis ramosis tenerrimis, 1,5 μ . cr., rosulato-confertis sessilibus; sporidiis fuscoideis rectis v. subcurvatis, 8-10 \times 3-3,5, tristichis, intra ascos hyalinis, extra fuscidulis.

Hab. ad chartam albam intra librum putrescentem in silva pr. Königstein Saxoniae (KRIEGER).

MICROMASTIA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 324 (Etym. a *micro*s minutus et *mastos* mamilla). — Perithecia superficialia globosa, ostiolo eximie papillata non perforato donata, atra membranacea, subiculo mucedineo parco insidentia. Asci globosi octospori; sporidiis e globoso trigonis, 1-cellularibus, hyalinis. — Gen. *Anixia* peraffine sed sporarum fabrica ab omnibus ad huc notis præcipue distinctum.

1. *Micromastia trigonospora* Speg., l. c. p. 325, fig. 6. — Peritheciis 3412
minutis, 120 μ . diam., sparsis eximie mamillatis, glabris, nitidulis, contextu minute parenchymatico olivaceo vix pellucido, basi hyphis radiantibus parcis tenuibus 3-5 μ . cr. ramulosis septulatis

hyalinis cinctis; ascis sæpius globosis 10-12 \approx 8-10, octosporis; sporidiis pusillis 3-3,5 μ . diam., obtuse angulatis e latere compressis, levibus, hyalinis.

Hab. ad culmos aridos putrescentesque Festucæ Hieronymi in cella humida, La Plata, Argentina Amer. austr.

2. *Micromastia fimicola* Syd. in Diedicke Aufzähl. Erfurts Micromyc. 3413 (1910) p. 26 (Jahrb. K. gem. Wiss. Erfurt, XXXVI, p. 146). — Peritheciis sparsis, superficialibus, globosis, membranaceis, atris, glabris, 175 μ . diam., collo 40-50 μ . longo, usque ad 30 μ . lato præditis, basi hyphis tenuibus, hyalinis, septatis, ramulosis cinctis; ascis numerosissimis, globosis v. ovato-globosis, octosporis, 9-10 diam.; sporidiis trigonis, levibus, hyalinis v. hyalino-fuscidulis, 3-5 μ . diam., continuis.

Hab. in fimo Cuniculorum in agro Erfurtensi. — Sporidia in cirrum rubiginosum expulsa.

POLYSPORIDIUM Syd., Ann. Mycol. VI (1008) p. 528 (Etym. polys *multus* et *sporidium*). — Perithecia in mycelio tenui, fibrilloso, atro subsuperficialia, applanato-globosa, membranacea, astoma. Asci ovati v. saccati, polyspori, aparaphysati. Sporidia continua, hyalina, conglobata. Subiculo mycelico et sporidiis continuis a *Pompolysporio* Magn. dignoscitur.

1. *Polysporidium Börnmülleri* Sydow, l. c. p. 528. — Mycelio maculas 3414 minutas $\frac{1}{2}$ -1 $\frac{1}{2}$ mm. latas, atras efformante, fibrilloso, tenui, matriæ arcte adnato, ex hyphis repentibus fuliginis septatis varie ramosis et anastomosantibus, crassitudine variis, 6-15 μ . cr., composito; peritheciis paucis aggregatis, applanato-globosis, atris, astomis, membranaceis, 90-140 μ . diam., contextu brunneo, pseudoparenchymatico; ascis ovoideis v. saccatis, apice rotundatis, leniter incrassatis, sessilibus, 38-62 \approx 24-32, sexdecimsporibus; sporidiis conglobatis, oblongo-ellipsoideis v. subnavicularibus, continuis, hyalinis, eguttulatis, 18-32 \approx 7-11.

Hab. in caulibus Dianthi orientalis, Kermanschah in monte Kuh Schiris Persiæ occid. (Th. STRAUSS, comm. J. BÖRNMÜLLER).

MELIOLOPSIS Sacc. — Syll. I p. 68, IX p. 375.

1. *Meliolopsis Boldoæ* Speg., Fungi Chilenses (1910) pag. 24, cum 3415 icon. — Subiculum hypophyllum setulosum, setulis simplicibus 150-250 \approx 6-10; peritheciis sparsis subglobosis parvis, astomis, glabris submembranaceis, collabescentibus, 150-180 μ . diam.; ascis

clavulatis longe tenuiterque pedicellatis aparaphysatis, 50-55 \approx 5-6; sporidiis elliptico-navicularibus minutis, hyalinis, 7-8 \approx 1,7-2.

Hab. in foliis vivis Boldoæ fragrantis, Cerro Caracol de Concepción Chile Amer. austr.

Sect. 1. Phæosporæ.

CHÆTOMIDIUM Zopf — Syll. I p. 39, IX p. 378.

1. *Chætomidium chlorochætum* Speg., An. Mus. Nac. Buenos Aires 3416 t. XIX (1909) p. 336. — Peritheciis globosis 150-200 μ . diam., primo villo duplici denso vestitis, demum plus minusve glabratis, atris, astomis v. obsoleto ostiolatis, membranaceis, contextu opaco olivaceo indistincto; pilis minoribus densis tenuibusque, 100-200 \approx 2-3, majoribus paucioribus elongatis crassioribus, 500-1000 \approx 6-7, simplicibus rectis acutiusculis, dense septulatis, subopacis virescenti-olivaceis; ascis antice obtusiusculis postice longe attenuato-pedicellatis, 40-100 \approx 2, aparaphysatis, octosporis; sporidiis levibus 12-14 \approx 7-10 utrinque sæpius subapiculatis, grosse 1-guttulatis, diu hyalinis serius fumosis.

Hab. ad culmos aridos putrescentes Festucæ Hieronymi in cella humida, La Plata Rep. Argentina Amer. austr.

2. *Chætomidium magnum* Bain. Bull. Soc. Mycol. Fr. XXV (1909) 3417 p. 194, t. 10, f. 1-5 (sine diagnosi). — Peritheciis subglobosis, c. 550 μ . diam., nigricantibus, astomis, dense piloso-setulosis; setulis filiformibus, e cyaneo nigricantibus aliis rectis, aliis eximie tortuoso-spiralibus, 8,4 μ . cr., peritheciis diametro triplo longioribus; ascis clavatis, deorsum sensim et longe stipitatis, apice rotundatis, octosporis; sporidiis subdistichis, e globoso ellipsoideis, 16,8 \approx 12-14, (ex icone perfecte sphaericis!) ex olivaceo brunneo-fuligineis.

Hab. in excremento Canis in Gallia.

3. *Chætomidium phyllactineum* Bain. Bull. Soc. Mycol. Franc. XXV 3418 (1909) p. 193, t. 11, f. 7-10. — Peritheciis confertis, globosis, 200 μ . diam. initio e hyalino fulvis diaphanis, demum nigricantibus opacis, ubique laxè setulosis; setulis divergentibus, 180 μ . long., rectiusculis, simplicibus apice obtusulis, basi dilatatis 14 μ . cr., continuis, rigidulis, fuligineis; ascis numerosis ovoideis vix stipitatis, diametro suo duplo longioribus, octosporis; sporidiis fusoido-limoniformibus, 19-20 \approx 8-9,5.

Hab. in charta emporetica putri in Gallia. — Ob appendiculas *Phyllactinium* in mentem revocat.

Sect. 3. Hyalodidymæ.

WENTIOMYCES Koord., Botan. Untersuch. (1907) p. 148 (Etym. a prof. F. A. F. C. WENT batavo). — Mycelium hypophyllum effusum, fuscum, septatum. Perithecia aggregata vel sparsa, astomatica, superficialia, globosa v. ovoideo-globosa, astoma, prosoplectenchymatica, membranacea, basi foliis adnata, appendiculata, appendiculis dimorphis; aliis numerosis filiformibus, longis v. longissimis, flexuosis, simplicibus v. rarissime subsimplicibus, dilute fuligineis, apicem versus subhyalinis, apice obtusatis, continuis; aliis brevioribus, rigidis, rectis, paucis, plerumque 4-6; obscure fuligineis, apice divisis, ramulis brevibus v. brevissimis subdilato-rotundatis. Asci numerosi c. 10-15, fasciculati, cylindraceo-clavati, octospori, paraphysati, crasse tunicati, apice rotundati. Sporidia subconglobata v. subdisticha, hyalina, medio uniseptata haud constricta.

1. *Wentiomycès javanicus* Koord., l. c. p. 168, fig. 9. — Peritheciis 3419 50-60 μ . diam.; peritheciis appendiculis longioribus filiformibus simplicibus 50-160 μ 2-3,5; appendiculis brevibus dichotome ramosis 12-32 μ 4; ascis 24-26 μ 4-6; sporidiis 8-9 μ 2,5 \times 3.

Hab. in foliis emortuis Fici elasticæ prope Penunggalan prov. Kedu ins. Javæ (KOORDERS).

CHILEMYCES Speg., Fungi chilenses (1910) p. 27 (Etym. *Chile* et *myces* h. e. fungus chilensis). — Perithecia superficialia globosa, astoma fuscula, mycelio albido insidentia et obvoluta. Asci elongati paraphysati octospori; sporidiis minutis didymis hyalinis.

1. *Chilemyces valparadisiacus* Speg., l. c. cum icon. — Peritheciis 3420 pusillis membranaceis, 75-100 μ . diam.; ascis subclavulatis breviter pedicellatis, 40-45 μ 6-7; sporidiis distichis ad septum non v. vix constrictis, 9-10 μ 3.

Hab. in foliis emortuis Puyæ chilensis, Cerro Alegre de Valparaíso, Chile Amer. austr.

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV p. 466, XVI p. 408, XVII p. 533.

1. *Dimerosporium Berliniæ* Pat. et Har., Bull. Soc. Mycol. Fr. XXIV 3421 Syll. fung. XXII (V-1912)

(1908) p. 15. — Maculis præcipue hypophyllis, umbrinis, irregularibus, ex hyphis repentibus, mollibus, septatis, absque hyphopodiis efformatis; peritheciis globosis, fuscis, 100-140 μ ., contextu anguloso-celluloso, cellulis circiter 8 μ . diam.; ascis ovoideis subsessilibus v. nodulo instructis, superne crassissime tunicatis, 62 \approx 32, 8-sporis; sporidiis ellipsoideis, una fine leniter attenuatis, pallide fuscis, transverse uniseptatis, levibus, 32-36 \approx 8-10.

Hab. in foliis Berliniæ sp., Chari Ungourras Africa (A. CHEVALIER).

2. *Dimerosporium mindanaense* P. Henn., Hedwigia XLVII (1908) 3422 p. 253. — Maculis mycelii effusis, atris, hyphis repentibus ramosis, fuscis in societate Meliolæ; peritheciis subglobosis, atro-cellulosis, 60-80 μ . diam.; ascis clavatis, obtusis, paraphysatis, 8-sporis, 22-30 \approx 8-10; sporidiis subdistichis ovoideis, 1-septatis, constrictis, hyalinis, 9-12 \approx 3.

Hab. in foliis Eugeniæ sp., Mindanao, Davao ins. Philippin. mart. 1904 (COPELAND).

3. *Dimerosporium pellicula* Syd., Ann. Myc. V (1907) pag. 339. — 3423 Hyphis repentibus, dense intricato-ramosis, remote septatis, fuliginis, pelliculas aterrimas epiphyllas facile secedentes plerumque totum folium occupantes efformantibus; conidiis sarcinuliformibus 4-8-cellularibus, fuligineis, cellulis singulis ca. 7-9 μ . diam.; peritheciis globosis v. subglobosis, fuligineis, c. 90-110 μ . diam.; ascis variabilibus, fusoides v. clavatis, plerumque attenuatis, rectis v. sæpius varie curvulis, 35-50 \approx 12-26 octosporis; sporidiis irregulariter distichis, oblongis, medio 1-septatis, non constrictis, hyalinis, intus nebulosis, 14-18 \approx 3-4.

Hab. in foliis Manihotis utilissimæ, in Costa Rica (TONDUZ). — *Dimerosporio pulchro* Sacc. proximum.

4. *Dimerosporium baccharidifolium* Speg., Fungi Paulist., Rev. Mus. 3424 La Plata t. XV (1908), p. 14. — Peritheciis erumpenti-superficialibus plerumque epiphyllis, hinc inde laxè gregariis, subglobosis 80-90 μ . diam., membranacæ-coriacellis, contextu minute parenchymatico olivaceo, subiculo destitutis, glabris, ostiolatis; ascis sursum crasse tunicatis deorsum breviter crasseque pedicellatis 40-50 \approx 15-20, paraphysibus paucis filiformibus obvallatis, octosporis; sporidiis distichis hyalinis, medio uni-septatis constrictulis, 14 \approx 4, loco supero obtusiusculo infero graciliore acutiusculo.

Hab. in foliis vivis Baccharidis cujusdam prope Sao Paulo Brasilia (USTERI) — A *Dimerio baccharidicola* P. Henn. certe di-

versum et cum *Dim. Baccharidis* Sacc. et *D. punctiformi* P. Henn. non comparandum.

5. *Dimerosporium Rickianum* Sacc. et Syd. in Saccardo, Not. Myc. IX, 3425 Ann. Myc. v. V (1907) p. 177. — Subiculo epiphylllo, superficiali, maculiformi, fusco-olivaceo v. subrufo, ex hyphis angustissimis, 4-5 μ . cr., repentibus, rectiusculis, radiantibus obsolete septulatis formato; maculis 2-4 mm. latis v. confluenso amplioribus; peritheciis in subiculo subsuperficialibus, gregariis, minutissimis, globulosis, 60-80 μ . diam., astomis, verticeque minute sinuose dehiscentibus; contextu minute celluloso, membranaceo, rufo-fusco; ascis ovoideis, apice obtusis, basi breviter apiculato-stipitatis, 36 \times 14, octosporis; sporidiis subtristichis, fuscoideis, utrinque acutis, rectiusculis, 14-15 \times 4, uniseptatis, non constrictis, eguttulatis, hyalinis.

Hab. in foliis adhuc vivis plantae ignotae (arborescentis?), Sao Leopoldo Brasiliae (Pat. J. RICK, communic. H. SYDOW).

6. *Dimerosporium minutissimum* v. Höhn. Fragm. Mykol. VII (1909) 3426 p. 45. — Epiphyllum pelliculas 4-5 mm. latas, nigricantes, tenues, subinde confluentes formans; hyphis 2-3 μ . cr., irregulariter flexis; peritheciis ovoideis, 45-60 μ . diam., tenui-membranaceis, sursum obtuse conoideis, glabris, superficialibus sparsis; hyphis sterilibus erectis, septatis, brunneis, 80 \times 4-5, apice conidium cylindraceum 2-4-cellulare, 18-22 \times 2-4 gerentibus; ostiolo nullo v. obsoleto; paraphysibus filiformibus dein evanidis; ascis paucis ovoideo-ellipticis v. breviter clavatis, infra inflatis, apice incrassatis, octosporis, 21-36 \times 11-13; sporidiis clavulatis, polystichis, hyalinis, bicellularibus, cellula sup. paullo latiore et brevior, rectis curvuliseve, utrinque rotundatis, 12-14 \times 3-4, extus submucosis.

Hab. in foliis arborum, socia *Asterina* consimili in Horto botanico Buitenzorg ins. Java. — *D. subpiloso* affine.

7. *Dimerosporium Adianti-curvati* Rehm, Ann. Mycol. V (1907) p. 522. 3427 — Peritheciis in maculis hypophyllis fusco-nigricantibus oblongis, ca. 1 cm. long., 0,5 cm. lat., ex hyphis Meliole cujusdam centrifugis formatis gregariis, sessilibus, globulosis, atris, glabris, 60-80 μ . diam., parenchymatico-contextis ad basim hyphis simplicibus fusciculis affixis; ascis ovalibus, apice crasse tunicatis, 30-35 \times 10-12 octosporis; sporidiis oblongo-clavatis, rectis, hyalinis, non constrictis, 12 \times 3, 2-3-stichis; paraphysibus tenerrimis, ramulosis.

Hab. in fronde *Adianti curvati*, Sao Francisco, Brasilia

(ULE comm. Dr. PAZSCHKE). — Ab affini *Dim. tropicali* sporidiis angustioribus, non constrictis dignoscendum.

8. *Dimerosporium apertum* Syd., Engler's Bot. Jahrb. 45. Bd. (1910) 3428 p. 263. — Peritheciis in mycelio *Meliolæ* parasiticis; mycelio tenui, parce evoluti, ex hyphis tenuibus flavidis v. hyalino-flavis ramosis 3-4 μ . cr. composito; peritheciis gregariis, globosis, glabris, atris, 90-140 μ . diam., centro poro subrotundo distincto apertis; ascis clavatis, apice rotundatis, subsessilibus, 35-45 \times 8-11, octosporis; sporidiis distichis, subfusiformibus, medio 1-septatis constrictisque, utrinque leniter attenuatis, hyalinis v. subhyalinis, 12-14 \times 3,5-4; paraphysibus numerosis, hyalinis, filiformibus, ascos superantibus; pycnidiis forma, magnitudine et structura perithecia æmulantibus; pycnidiosporis continuis, ovatis v. ellipsoideis, hyalinis, 4-5 \times 2-3,5.

Hab. in mycelio *Meliolæ* ejusdam in foliis *Rhynchospora* sp. — Africæ trop. Germaniæ (BUSSE). — *Dimerosp. meliolicolæ* affine. *Meliola* videtur *Mel. amphitrichæ* similis.

9. *Dimerosporium appendiculatum* Earle, Bull. of the New York Bot. Gard. (1904) p. 303. — In mycelio *Asterinæ* parasiticum; mycelio proprio parco ex hyphis pallidis, 3 μ . cr., agglutinatissimis constante; peritheciis globosis, 70-100 μ . diam., molliusculis, contextu e cellulis 6-8 μ . diam. formato, appendicibus seu setis 12-20 curvatis, atro-fuscis, opacis, obtusis, 30-40 \times 4 armato; ascis fasciculatis, late clavatis v. anguste obovatis, stipitatis, 8-sporis, 35-50 \times 10-12; sporidiis inordinatis, pallide fuscis, cylindratis, æqualiter 1-septatis, vix constrictis, 14-16 \times 4.

Hab. parasiticum in *Asterina* Sidæ ad folia Sidæ carpinifoliæ, Porto Rico (HELLER) et Jamaica (EARLE).

10. *Dimerosporium Balladynæ* Raciborski, Bull. Ac. Sc. Cracovie 3430 (1909) p. 373. — Hyphis brunneis, septatis, 2-3 μ . cr., hyphopodiis et setis carentibus, sed hinc inde protuberantiis præditis; irregulariter flexis, crebro ramosis, in subiculo *Balladynæ* parasiticis; peritheciis atro-brunneis, globosis, sessilibus, tenui-tunicatis astomis, 95-120 μ . diam.; ascis tereti-clavatis, curvulis, 40-48 \times 12-14, apice acutato-rotundatis, tenui-tunicatis, octosporis; paraphysibus genuinis nullis sed tantum hyphis brevissimis coalitis; sporidiis bicellularibus, levibus, 11-13 \times 4-5, cellulis inæqualibus, membrana brunnea.

Hab. in subiculo *Balladynæ* *Medinillæ* pr. Salak ad Buitenzorg ins. Javæ.

DIMERIELLA Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 12 (Etym. a *Dimerio* cujus est analogum genus). — Subiculum parcum. Perithecia subglobosa, astoma, setulosa. Sporidia didyma, hyalina, octona. — A gen. *Dimerosporio* dignoscitur imprimis peritheciis setulosis. — *Dimerosporia* plurima descripta sec. cl. Spegazzini huc ducenda, e. gr.: *Dimeriella dubiosa* (Speg.), *D. Asterinarum* (Speg.), *D. guarapiensis* (Speg.) *D. solanicola* (B. et C.), *D. Elliotti* (A. L. Smith), *D. coronata* (Speg.), *D. Meyeri-Hermanni* (P. Henn.). — Auctore cl. Spegazzinio, l. c. p. 13, gen. n. *Phæodimeriella* Speg. a *Dimeriella* dignoscendum est sporidiis coloratis et amplexititur imprimis: *Ph. Engleriana* (Henn.), *Ph. hamata* (Penz. et Sacc.), *Ph. cetotricha* (Pat. et Har.) *Ph. tasmanica* (Massee), *Ph. occulta* (Rac.) etc.

1. *Dimeriella hirtula* Spegazz., l. c. fig. D. — Maculis nullis sed ma- 3481
trice tota plus minusve fusciscenti; peritheciis superficialibus perpusillis subhemisphaericis 60-90 μ . diam., laxe gregariis, subiculo parcissimo insidentibus, nigris, 9-12 setulis 1-2-cellularibus acutis rigidulis 20-30 \times 4-5 adpersis, membranaceis, contextu parenchymatico fuligineo parum distincto; ascis aparaphysatis, obovatis, 35-40 \times 15-18, octosporis subsessilibus; sporidiis distichis v. subconglobatis medio uniseptatis 14 \times 5, loculis isomacris, conoideis, acutiusculis.

Hab. in foliis vivis *Baccharidis* sp., Ipiranga até Moça Brasileira (USTERI). — Species *Dimerosporio punctiformi* P. Henn. certe peraffinis, satis tamen distincta videtur.

2. *Dimeriella horridula* Syd., in Theiss. Ann. Mycol. VII (1909) p. 352. 3482
— Epiphylla, maculas rotundatas 2-5 mm. latas efformans; mycelio parce evoluto, ex hyphis flexuosis septatis fuscidulis 3,5 μ . cr. composito; peritheciis gregariis globosis, astomis, demum depressis, superficialibus, 75-105 μ . diam., præcipue basi v. in parte inferiore pilis longissimis rectis v. subrectis fuscis parce septatis 100-160 μ . long. et 4-5 μ . cr. dense obsitis; ascis cylindræo-clavatis, apice obtusis, sessilibus v. brevissime noduloso-stipitatis, 8-sporis, 24-34 \times 8-11; sporidiis distichis, oblongo-ellipsoideis, primo 4-guttulatis, dein medio 1-septatis, non constrictis, hyalinis, 8-11 \times 2,5-3; paraphysibus filiformibus, simplicibus, hyalinis, c. 1,5 μ . crassis.

Hab. in foliis vivis *Baccharidis* sp., Sao Leopoldo Rio Grande do Sul, Brasilia.

3. *Dimeriella uncinata* Theiss., Broteria (1910) pag. 21. — Maculis 3483

epiphyllis, nigerrimis, opacis, 2-4 mm. diam. vel confluentibus; peritheciis globosis, atris, ubique sparsis, contextu fuligineo parenchymatico, 80-110 μ . diam., circum circa setulis brevibus fortiter uncinato-recurvatis, læte fuscis, basi nigrescenti suffultis, 14-18 μ . altis (extensis 24-28 μ . longis) 3-4 μ . cr., obsitis; ascis ellipsoideo-cylindricis, 18-26 \times 5-6; sporidiis brunneolis, distichis, 1-septatis, 6-7 \times 2-2,5, cellulis subæqualibus.

Hab. in foliis Cestri lanuginosi epiphylla, Sao Leopoldo, Rio Grande do Sul Brasilæ.

Sect. 4. Phæodidymæ.

DIMERIUM Sacc. et Syd. — Syll. XVI p. 410, XVII p. 537.

1. *Dimerium elegans* Syd., Ann. Mycol. VII (1909) p. 174. — Epi- 3434
phyllum, plagulas orbiculares 1-3 mm. latas atras elevato-discoideas velutinas efformans; peritheciis 10-30 in quaque plagula dense aggregatis, sæpe concentrice dispositis, globosis, atris, nitidis, astomis, demum centro leniter collabescentibus, 200-275 μ . diam., basi hyphis mycelicis numerosissimis radiantibus atris, haud ramosis parce septatis, usque ad 350 μ . longis, 8-11 μ . crass. ubique cinctis; ascis clavatis, apice rotundatis, basi in pedicellum attenuatis, 100-140 \times 18-22, 4-sporis; sporidiis monostichis, ellipsoideis, utrinque rotundatis, primo continuis hyalinis, dein medio 1-septatis, fuligineis, non constrictis, 21-30 \times 10-14; paraphysibus numerosis, hyalinis, crassiusculis (3-4 μ).

Hab. in foliis Pasanæ cuspidatæ Kura-mura Tosa Japoniæ (YOSHINAGA).

2. *Dimerium Autrani* (Henn.) Sacc. et Trott. *Dimerosporium Autrani* 3435
Henn. in Bull. Herb. Boiss. (1893) p. 116, t. V, f. 15. — Mycelio epiphylo, crustaceo nigro, maculis rotundatis sæpe confluentibus e filis ramosis fuligineis constanti; peritheciis e mycelio erumpentibus, gregariis, globosis, atro-fuscis, rugulosis, usque ad 90 μ . diam.; ascis obovoideis, hyalinis, subsessilibus, octosporis, 30-42 \times 24-28; sporidiis distichis, ellipsoideis v. subclavatis, medio 1-septatis, leviter constrictis, utrinque obtusis, subfuscis, 17-21 \times 7-9.
Hab. in foliis vivis Canthii Schimperiani pr. Ghinda in Erythræa Afr.

3. *Dimerium crustaceum* (Theiss.) Sacc. et Trott. *Dimerosporium* 3436
crustaceum Theiss., Broteria (1910) p. 20. — Maculis nigris, ve-

lutinis, minutis, 1-2 mm. diam. in epiphyllis dispersis, membranaeo-crustaceis, cohererentibus, ex hyphis densissime contextis, brunneis flexuosis, septatis, 3-4 μ . cr., ramosis formatis; hypharum articulis sæpius pseudopodia alterna, flaccide pendula, ramuliformia, oblonga, stipitata 6-8 \times 2,5-3, passim perithecia nova generantia emittentibus; peritheciis parenchymaticis rhomboideo-cellulosis opacis e globoso subpiriformibus, nudis, 70-90 μ . diam., hyphis subiculi cinctis; ascis numerosis, primitus globosis 25-30 μ . diam., dein elliptico-extensis, 35-42 \times 8-9; sporidiis conglobatis, 1-septatis, cellulis subinæqualibus, demum fusciscentibus 10-12 \times 4-5.

Hab. in foliis Rubiaceæ cujusdam, Sao Leopoldo Rio Grande do Sul Brasiliæ.

4. *Dimerium radio-fissile* Saccardo, Fungi aliquot africani, Bol. Soc. Broteriana v. XXI (1904-1905) pag. 4. — Peritheciis plerumque epiphyllis in soros perexiguos subcirculares, 400-600 μ . diam., junctis, globulosis, astomis, nigris glabris membranaceis, 90-120 μ . diam., mox vertice irregulariter dehiscentibus et sub pressione statim in lacinias numerosas radiatim fissis et tunc usque ad 200-220 μ . dilatatis; ascis e globoso ovoideis, basi obtuse apiculatis, 30-45 \times 25-30, octosporis, paraphysibus filiformibus densis, hyalinis obvallatis; sporidiis didymis, constrictis, 18-21 \times 8-11, utrinque rotundatis, maturis fuligineo-olivaceis, plerumque 2-guttatis; subiculo sub soris effuso sed non excedente, ex hyphis fuligineis dense reticulatis et hyphopodiis clavulatis formato.

Hab. in foliis adhuc vivis (habitu fere Colei) in ins. S. Thomé Africæ (A. MOLLER). — Peritheciis contextu subprosenchymatico, fuligineo mox sub levi pressione radiatim fissis et subiculo ad soros limitato species mox dignoscitur ab affinibus *Dim. Psilostomatis* et *Dim. Magnolice*.

5. *Dimerium Guinieri* R. Maire, Ann. Mycol. VI (1908) p. 144, fig. 1, tab I, fig. 6. — Mycelio ex hyphis tenuibus, ramosis, dilute brunneis, 3-5 μ . diam., composito, sæpe hyphas Meliolæ strato plus minusve pseudoparenchymatico circumdante; peritheciis globosis vel ovoideis, 100-110 μ . diam., atro-brunneis, glabris, ostiolo papillato coronatis, contextu tenui, pseudoparenchymatico; ascis paraphysatis, oblongo-cylindraceis, 43-52 \times 7-8, octosporis; ascosporis distichis, ochraceo-brunneis, levibus, ovoideo-oblongis 12-13 \times 4-5, medio septatis nec constrictis, loculo superiore conspicue crassiore.

Hab. in cæspitibus Meliolæ amphitrichæ ad folia Cæsariæ cujusdam prope Sao Paulo, Brasiliæ.

6. *Dimerium incrustans* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3439 t. XV (1908) p. 13. — Peritheciis pusillis globosis 80 μ . c. cr. membranaceis, contextu parenchymatico subopace fuligineo donatis, subiculo tenuissimo (hyphis 3-4 μ . cr.) fibroso hinc inde noduloso-parenchymatico olivaceo, hyphas Meliolarum v. Asterinarum arcte incrustans; ascis non v. vix obclavulatis 60 \times 14 brevissime nodulosoque pedicellatis apice obtusis, octosporis, paraphysibus paucis filiformibus longioribus immixtis; sporidiis subclavulatis 13-14 \times 5-6, primo hyalinis dein fuliginis, medio septatis non v. vix constrictis, loculo supero obtuso infero conoideo subacutiore.
Hab. in subiculo Asterinæ cujusdam prope Ipiranga Brasiliæ (USTERI).
7. *Dimerium leptosporum* Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 14. — Subiculo submucedineo parum manifestato; peritheciis globosis astomis, glabris, parce gregariis, membranaceis, contextu parenchymatico olivaceo; ascis basi brevissime pedicellatis e cylindraceo obclavulatis, paraphysatis, 40-50 \times 12-15, octosporis; sporidiis fuliginis, distichis clavulatis 15-20 \times 4-5 ad septum leniter excentricum vix constrictis, loculo infero acutiore.
Hab. in subiculo Asterinarum epiphyllarum ad folia coriacea circa Sao Paulo Brasiliæ (USTERI).
8. *Dimerium Gymnosporæ* (P. Henn.) Syd. Ann. Myc. VII (1909) 3441 p. 546. — Ita vocandum *Dimerosporium Gymnosporiæ* P. Henn. — Syll. XVI, p. 408.
9. *Dimerium* (*Dimerosporiopsis*) *Englerianum* (P. Henn.) Sacc. — Syll. XVII, p. 537. — Teste cl. v. Höhnelt (Fragm. z. Mykol. VIII, p. 5-7) esset genuina species *Coleroæ* ipseque auctor addit *Antennariam* Link (= *Antennularia* Reichenb.), *Gibberam* Fries et *Coleroam* Rabenh. unum idemque genus sistere, de qua æquatione vere mirabili liceat interdum dubitare.
- ALINA** Raciborski, Bull. Ac. Sc. Cracovie (1909) pag. 374 (Etym. prob. e nom. proprio). — Parasitica; mycelio endogeno hyalino, haustoriis prædito. Hyphæ superficiales radiantes maculas nigras formantes, hyphopodiis carentes, hinc inde cellulas phialiformes conidio fusoides terminatas ferentes. Perithecia globosa, breviter pedicellata, astoma, setulis circumdata, contextu unistrato, 4-11 ascos globoso-ovoideos, octosporos includentia. Sporidia bicellularia, brunnea. — Generi *Balladynæ* affinis sed vere parasitica, perithecia oligoasca etc.

1. *Alina Jasmini* Raciborski, Bull. Ac. Sc. Cracovia (1909) p. 375. — 3443
Characteres generis. Amphigena; hyphis superfic. 4-6 μ . cr.; conidiis fusoideis 40-46 \approx 6-8, crasse tunicatis, 2-3-septatis; peritheciis 40-50 μ . diam.; pedicellis 5-6 \approx 3-4; ascis ovoideis 21-25 \approx 14-17, octosporis; sporidiis ovoideis, 12-15 \approx 4-5, bicellularibus, cellulis inæqualibus, brunneis.

Hab in foliis Jasmini sp. pr. Buitenzorg ins. Javæ.

BALLADYNA Rac. — Syll. XVI p. 411.

1. *Balladyna Medinillæ* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 373. 3444
— Amphigena, effusa, nigra, subrotunda, interdum confluens; hyphis brunneo-nigricantibus, copiosis, irregulariter ramosis, 9 μ . cr., hyphopodiis, semiglobosis, 8-12 μ . long., præditis; peritheciis asurgentibus, stipitatis, subglobosis, 40-48 μ . diam.; stipitibus 24-40 \approx 7-9; peritheciis stratis quaternis, exterioribus brunneis, demum secedentibus et stratum interius diaphanum relinquuntibus; asco unico in quoque perithecio, octosporo aparaphysato; sporidiis diu hyalinis, demum pallide brunneis, tenuiter tunicatis, levibus, bicellularibus, medio constrictis 25-30 \approx 13-15, utrinque rotundatis.

Hab. in foliis Medinillæ pr. Salak ins. Javæ.

2. *Balladyna amazonica* v. Höhn. Frågm. Myk. IX, p. 7 (1909). — 3445
Superficialis epiphylla, nigricans, 1,5 mm. long., hyphis radiantibus 2-3 μ . cr., olivaceo-fuscis, ramosis, adpressis; peritheciis sessilibus v. breviter pedicellatis, confertis, numerosis 50-60 \approx 36, ovoideis, grosse cellulosi, monoascis; ascis ovoideis 32-40 \approx 24-26, octosporis; sporidiis dilute olivaceo-flavidis, 2-cellularibus, 18-21 \approx 8,5, cellula super. sæpius latiore et brevior.

Hab. in foliis Cecropiæ sp. præcipue ad nervos crassiores, Journ. Amaz. Brasiliæ, sociâ *Auerswaldia Cecropiæ* (E. Ulf). — Inter perithecia occurrunt, ut videtur, pycnidia subcylindracea 60 \approx 25-28, apice sæpe lobulata.

PARODIELLA Speg. — Syll. I p. 717, IX p. 409, XI p. 260, XIV p. 469, XVI p. 412, XVII p. 541.

1. *Parodiella kwangensis* P. Henn., in Fl. du Bas- et Moy.-Congo, 3446 in Ann. Mus. du Congo v. II, fasc. III (1908) p. 225. — Maculis rotundatis v. effusis, fuscis; peritheciis hypophyllis concentricè dispositis ovoideis, astomis, ferrugineo-atris 130-170 μ . cr., mycelio ferrugineo-fusco circumdati, hyphis ramosis, septatis, 4-10 μ . c. cr., conidiis oblongo-clavatis v. subfusoideis obtusis, 2-septatis

vix constrictis, ochraceis, 35-70 \approx 13-18; ascis clavatis vertice rotundato-obtusis, tunicatis, 8-sporis, 90-110 \approx 30-40; sporidiis ellipsoideis v. ovoideis, subdistichis v. oblique monostichis, flavo-brunneis, medio 1-septatis constrictis, 30-36 \approx 14-17.

Hab. in foliis coriaceis arboris cujusdam, Kisanu Congo, Afr. (VANDERYST) una cum *Helminthosporio kwangensi* P. Henn.

MAIREELLA Syd. in litt. ad Maire R., Ann. Mycol. VI (1908) p. 146 (Etym. a prof. R. MAIRE, mycologo gallico eximio). — Perithecia astoma, globosa, superficialia, cæspitosa, pseudostromate inserta, contextu pseudoparenchymatico, fusco. Asci elongati, octospori, aparaphysati (?); sporidia didyma brunnea. — Est *Parodiella* composita seu *Othia* perisporiacea.

1. **Maireella maculans** Syd., l. c. p. 146, fig. 2, tab. I, fig. 1, 3. — 3447
Acervulis peritheciarum 5-7 basi confluentium epiphyllis, centro maculæ rotundatæ, e pallescente brunneæ, 2-3 mm. diam., singulis insidentibus, 0,4-0,5 mm. diam.; peritheciis nigris, globosis, basi coalitis, astomis, rugulosis, interdum ad basim pilis nonnullis longiusculis, septatis, decumbentibus præditis, ceterum glabris, 150-200 μ . diam., contextu pseudo-parenchymatico, circa 40 μ . crasso; ascis oblongo-clavatis, octosporis, 50-75 \approx 18-26; ascosporis distichis v. tristichis, oblongo-lanceolatis, medio septatis et constrictis, 19-25 \approx 8-9, cellulis subæqualibus, episporio tenui, diu hyalino v. subhyalino, in spora matura dilute brunneo, minutissime verruculoso v. levi; paraphysibus filiformibus, membrana gelificata; mycelio per contextum folii expanso.

Hab. in foliis vivis plantæ ignotæ, forsan Compositæ, Alto da Serra prope Sao Paulo Brasiliæ.

Sect. 5. Hyalophragmiæ.

ZUKALIA Sacc. — Syll. IX p. 431, XI p. 268, XIV p. 17, XVI p. 416, XVII p. 543.

1. **Zukalia Gymnopogonis** v. Keissl., Ann. Mycol. VII (1909) p. 291. 3448
— Epiphyllâ; maculis nullis v. folio vix pallescente; mycelio tenui, laxissimo, subiculum non formante, hyphis brunneis, septatis (cellulis oblongis, raro moniliformibus, quasi chlamydosporas simulantibus), subrectis, sparse fere rectangulariter ramosis, c. 6 μ . lat.; peritheciis magnis fere superficialibus, sparsis, (raro 2-3 sub-

confluentibus), globosis, astomis, nigris, c. 300-500 μ . diam.; ascis cylindraceutis, breviter stipitatis, tenuiter tunicatis, 8-sporis, aparaphysatis, c. 50-55 \times 10; sporidiis subdistichis, subclavatis, hyalinis, eguttulatis, 2-septatis, ad septa non constrictis, c. 15 \times 5.

Hab. ad folia viva *Gymnopogonis scandentis*, in insula Samoa Upolu, in silvis primævis supra Utumapu (RECHINGER).

2. *Zukalia Usteri* Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, 3449 p. 14. — Peritheciis nigris sparsis hypophyllis 100-200 μ . diam., villo occultis, globosis, glabris, astomis, membranaceis, contextu parenchymatico minuto, densoque olivaceo-fuligineo; subiculo non invento; ascis cylindraceutis apice subtruncato-rotundatis, basi breviter cuneato-pedicellatis, 70-80 \times 10, parce paraphysatis; sporidiis subclavulatis rectis v. leniter curvulis, 3-septatis ad septum medium tantum constrictis, hyalinis, loculo supremo obtusiore infimo acutiore, 16-18 \times 4.

Hab. in foliis coriaceis dorso albo-tomentosis, prope Ipiranga Brasilæ (USTERI).

3. *Zukalia transiens* v. Höhn. Fragm. z. Mykol. XII (1910) p. 41. 3450 -- Peritheciis depresso-globosis, nigris, siccis leviter collabentibus, 200-250 μ . diam., subiculo tenuissimo albo circumdatis, hyphis hyalinis, ramosis, inter se decussantibus 2-4 μ . cr., insidentibus, sparsis; conidiis in subiculo, triradiatis, dilute violaceo-brunneis, magnitudine variis, *triposporioides* interspersis; peritheciis carnosulis, violaceo-brunneis, grosse cellulosi, cellulis 8-12 μ . diam., prope ostiolum rotundum paullo minoribus ad basim in subiculum sensim abeuntibus; ascis aparaphysatis, fusoides-clavatis, tenuitunicatis, 80-100 \times 6, basi in stipitem 20 μ . long., crassum productis; sporidiis octonis cylindraceutis, leviter curvis, utrinque acutis, 42-76 \times 4, 9-13-septatis, non constrictis.

Hab. in foliis *Fici* sp. Ost-Usambara Africa (ZIMMERMANN).

4. *Zukalia parasitans* v. Höhn., Fragm. Mycol. VIII (1909) p. 22. — 3451 Hyphis parvis, recte excurrentibus, diaphane brunneis, septatis, 3 μ . cr., hyphopodiis nullis; peritheciis gregariis verticaliter ovoideo-oblongis, subinde breviter stipitatis, nigris, glabris, astomis, 70-100 altis, 46-60 μ . cr., ex cellulis castaneo-brunneis, 6-8 μ . lat., formatis; ascis aparaphysatis, paucis, crasse clavato-fusoides, apice obtusis, 28-41 \times 14-16, octosporis; sporidiis bi-triseriatis, oblongo-clavatis, hyalinis, basi acutulis, mucosobvolutis, 3-4-cellularibus, non constrictis, 14-18 \times 3-3.5.

Hab. parasitica in crusta mycelica *Limacinulæ samoensis* ad folia *Fici elasticæ*, *Tjibodas insulæ Javæ*.

5. *Zukalia vagans* Spegazz., *Fungi Paulist.*, *Rev. Mus. La Plata* t. XV, 8452 pag. 14. — Peritheciis hinc inde laxè gregariis, ovatis v. ovato-depressis, minutis, per ætatem non callapsis, medio plus minusve umbonatis, ostiolatis, glabris, membranaceis, contextu parenchymatico minuto, parum distincto donatis, subiculo membranaceo-submucoso tenuissimo late matricem incrustante olivaceo, insidentibus; ascis obclavulatis apice subtruncatis basi brevissime cuneato-pedicellatis $60-70 \times 10-14$, octosporis; sporidiis hyalinis subellipsoideis utrinque acutiusculis, rotundatis, 3-septatis, ad septa leniter constrictis, $16-18 \times 6-7$, rectis v. inæquilateralibus.

Hab. in subiculo *Meliolarum* et *Asterinarum* ad folia viva *Elæagni reflexi* et aliarum arbuscularum in Horto botanico paulistano, Brasilia (USTERI). — var. *brachycarpa* Speg., l. c.: a typo differt peritheciis non umbonatis obsoleteque ostiolatis (an quandoque astomis?) per ætatem collabescentibus, ascis ellipsoideo-subclavulatis, $40-60 \times 14-20$; sporidiis vix minoribus $14-18$, sæpius $16 \times 4-6$. — In subiculo *Meliolæ* cujusdam ad folia *Coffeæ arabicæ* nec non *Spirææ cantoniensis*, in Horto botanico Paulistano, Brasilia (USTERI).

6. *Zukalia paraensis* P. Henn., in *Rehm Ascom. exsicc. fasc. 42*, 8453 n. 1800; *Ann. Mycol.* VI (1908) p. 490 (nomen nudum).

Hab. in pag. sup. foliorum *Anacardii occidentalis*, Parâ Brasiliæ (C. F. BAKER). — *Zukalia dimerosporioides* (Speg.) Sacc. — *Syll.* IX, pag. 434 — teste v. Höhnelt esset species *Gibberellæ*; observandum tamen contextum ejus, sec. cl. Spegazzini, esse *atrofuligineum* a *Gibberella* abhorrentem.

Sect. 4. Phæophragmiæ.

PERISPORIUM Fr. — *Syll.* I p. 55, IX p. 412, XI p. 260, XVII p. 544.

1. *Perisporium macrocarpum* Saccardo, *Not. Myc.* VI, *Ann. Myc.* 3454 v. III (1905) p. 510. — Peritheciis gregariis v. hinc inde dense confertis, superficialibus, globosis vel leviter depressis, astomis, majusculis 1 mm. diam., carbonaceis, opace nigris, fragilibus, superficie denique minute foveolato-areolatis; contextu subcarbonaceo, atro, parum distincto; ascis? jam resorptis; sporidiis oblongo-

cylindræis 4-5-articulatis, $40 \approx 9-11$, ad septa constrictis, articulis, initio subcuboideis, mox vero globulosis, $9-11 \mu$. diam., fuligineo-nigricantibus.

Hab. in disco atrato putrescente arboris (Piri?) in agro Tarvisino (Treviso) Ital. bor. Legi cum amico SPEGAZZINI multis abhinc annis sed, ascis ignotis, descriptionem ejus prætermisi; tamen a generis ceteris speciebus omnino differt præsertim peritheciis majoribus areolatis sporidiis majoribus etc.

2. **Perisporium Armeniacæ** Hollós, Ann. Mus. Nac. Hung. IV (1906) 3455 p. 329, tab. VIII, fig. 2. — Peritheciis superficialibus, gregariis hemisphæricis, astomis, brunneo-nigris, glabris, nitidulis, $300-400 \mu$. diam.; ascis cylindræis, breve stipitatis, 4-8-sporis, $54-60 \approx 8-10$; paraphysibus filiformibus, ramosis, hyalinis, septatis et guttulis, compluribus locis incrassatis; sporidiis cylindræis, rectis v. curvulis, utrinque attenuatis, 3 septatis, ad septa valide constrictis, olivaceo-brunneis, $30-40 \approx 3-4$, loculis facile secedentibus, segmentis terminalibus $9-12 \approx 3-4$.

Hab. in putamine putrescente Armeniacæ vulgaris, keeskemét Hungariæ. — A *Perisp. funiculato* Preuss diversum.

MELIOLA Fr. — Syll. I p. 60, IX p. 413, XI p. 260, XIV p. 470, XVI p. 413, XVII p. 546.

1. **Meliola Thouiniæ** Earle, Bull. of the New York Bot. Gard. (1904) 3456 p. 308. — Epiphylla, pelliculas tenues nigras 3-6 mm. diam. sæpe effusas et indeterminatas formans; hyphis 7μ . cr., septatis, articulis $12-16 \mu$, long.; hyphopodiis copiosis, alternis v. suboppositis, subcylindræis, $14-16 \approx 8-9$, cellula basali $3-4 \mu$. long., superiori ellipsoidea obtusa; hyphopodiis mucronatis, copiosis, oppositis conoideis v. phialiformibus, obtusis, $20 \approx 7$; setis parvis, $300-400 \approx 8$, rectis, apice acutis, opacis; peritheciis copiosis, collabentibus, ostiolatis, minutis, $110-150 \mu$. diam. glabris, ex cellulis compactis 8μ . diam. formatis; ascis ovoideis, breve stipitatis, $40-50 \approx 25$, bi-trisporis; sporidiis 4-septatis, cylindræis, leviter constrictis, obtusis, atro-fuscis, $35-40 \approx 12-14$.

Hab. in foliis Thouiniæ striatæ, Porto Rico (HELLER). — Affinis *M. stenosporæ* Wint.

2. **Meliola crucifera** Starb., Ascom. Schwed. Chaco-Cordill. Exp. 3457 Arkiv f. Bot. Bd. V (1905) pag. 7. — Maculis epiphyllis, rarius hypophyllis sine ordine sparsis, interdum confluentibus, vage orbiculariter et dendritice determinatis, 1-3 mm. diam., atris; my-

celio facillime secedente melioloideo, hyphis septatis, ramosis, 5-10 μ . latis, composito, hyphopodiis capitatis plerumque oppositis, cylindræis, cellula basilari discoidea, exteriore sæpe curvula; hyphopodiis mucronatis non visis; setis numerosis, etiam sed rarisime ex peritheciis orientibus, erectis, rigidis, opacis, non septatis, sæpissime sursum quadrifurcatis, ramulis omnibus ad apicem iterum dichotome furcatis vel alternantibus binis indivisis, binis semel furcatis, interdum ramulis duobus vel tribus indivisis v. uno alterove furcato, omnibus acutatis, primo eleganter recurvatis, denique angulum rectum formantibus, 140-200 μ 8-12; ramulis primariis 7.5-15 μ 5, secundariis 4 μ 2; peritheciis centrum maculæ versus plerumque confertis, primo globosis, mox, ut videtur, collapsis, verruculosus, 150-200 μ . diam.; ascis ovoideis, bisporis 63 μ 25, trisporis 76 μ 38; sporidiis 4-septatis, ad septa constrictis, utrinque rotundatis, fuliginæis, 38-45 μ 15-17; hyphopodiis capitatis 19-21 μ 9, cellula externa 12-15 μ . long.

Hab. in foliis vivis Melicocæ lepidopetalæ, Asuncion, Paraguay (MALME). — A *M. furcata* cui affinis, setis et hyphopodiis plane divergit (Cfr. Gaillard, Le genre Meliola, Paris 1892, p. 107, Pl. XIX, fig. 4): etiam a *M. Sapindacearum* Speg. bene diversa secundum figuram apud Gaillard (Soc. myc. 1892, T. XV, fig. 3).

3. *Meliola Andiræ* Earle, Bull. of the New York Bot. Gard. (1904) 3458 pag. 303. — Epiphylla; maculas late effusas brunneas formans; hyphis longis parce septatis, 7 μ . cr., articulis 30-35 μ . long.; hyphopodiis capitatis, oppositis, anguste obovatis, 12-14 μ 8-10; hyphopodiis mucronatis, hinc inde dense confertis ampulliformibus, collo sæpe excentrico et curvo, 16-18 μ . longo, cellula basali brevissima, 2-3 μ .; setis sparsis, 200-250 μ 7, basi tuberculatis sursum subcuspidatis curvatisque; peritheciis astomis, minutis, 150-200 μ . diam., glabris, demum collabentibus; ascis 2-4-sporis mox diffusis; sporidiis fuliginæis, 4-septatis, leviter constrictis, obtusis, subcompressis, 35-40 μ 9-12.

Hab. in foliis Andiræ inermis, Porto Rico (HELLER).

4. *Meliola Chamæcristæ* Earle, Bull. of the New York Bot. Gard. 3459 (1904) p. 304. — Amphigena et caulicola, effusa, pelliculas tenues nigras formans; hyphis læte fuscis, inæqualibus, undulatis, 7-8 μ . cr., cellulis 30-35 μ . longis; hyphopodiis capitatis alternis v. sparsis, irregularibus, subcylindricis, pro more curvatis et circinantibus, 16-25 μ 9-10; hyphopodiis mucronatis non visis; setis raris,

sparsis, 200-250 \approx 7, rectis obtuse tenuatis, apice pallidioribus; peritheciis copiosis, sparsis, globosis, minutis, 120-150 μ . diam., contextu tenui subpellucido extus cellulis prominulis 10-12 μ . diam., colliculoso; ascis ellipsoideis, plerumque 4-sporis; sporidiis 4-septatis, pallide fuligineis, cylindraceis, valde constrictis, obtusis, minutis, 30 \approx 10-11.

Hab. in foliis caulibusque Chamæcristæ glandulosæ, Porto Rico (HELLER). — Affinis *M. microspora*.

5. *Meliola Yerbæ* Speg., Hongos d. Yerba Mate in Ann. Mus. Nac. 3460 Buenos Aires t. XVII (1908) pag. 115. — Amphigena; plagulis suborbicularibus tenuibus arcte adhærentibus ambitu effuso-evanescentibus, atris, glabris, 4-8 mm. diam.; hyphopodiis clavulato-obpiriformibus, nodulosis, alternis, 2-3-cellularibus 25-30 \approx 15; peritheciis hypothallo scutiformi insidentibus, hyphis paucis uncinulatis, 80 \approx 5-6, cinctis, 200 μ . diam.; ascis mox diffuis, ellipsoideis brevissime pedicellatis, 50-60 \approx 35-40, bi-trisporis; sporidiis rectis e latere vix compressulis, 40-50 \approx 16-22, utrinque rotundatis, 4-septatis, leviter constrictis, fuligineis, grosse 5-guttulatis.

Hab. ad folia viva Ilícis paraguayensis, Territorio Misiones Argentinae.

6. *Meliola Theobromæ* F. C. v. Faber, in Arbeit. K. Biol. Anst. Ber. 3461 lin, VII (1909) pag. 220. — Peritheciis superficialibus sphaericis, atris, levibus, glabris, 110-130 μ . diam., mycelio in foliorum superficie effuso nigro insertis, 110-130 μ . diam.; ascis obovato-ellipsoideis, 28 \approx 14, octosporis, aparaphysatis; sporidiis ovoideis, continuis, translucidis, 10 μ . longis.

Hab. in pag. super. foliorum Theobromæ Cacao, Camerun Afric. trop. — Crustas atras crassas format. Diagnosis incompleta. Si species jugiter hyalospora esset potius *Meliolopsis*.

7. *Meliola lanigera* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 3462 p. 327, cum icon. — Plagulis orbicularibus v. difformibus, sparsis 1-5 mm. diam., hypothallo submembranaceo facile a substrato secedente constitutis, hyphis repentibus flexuosis 10-12 μ . cr., densissime intertextis hyphopodiis alternis, clavulatis, sublevibus 24 \approx 15 densis auctis, setulis rectis 250-400 \approx 10-12, opacis fuligineis vix apice integro subpellucidis ornatis; peritheciis globosis, grosse verrucosis nudis, 200-250 μ . diam.; ascis ellipsoideis brevissime crasseque pedicellatis 55-60 \approx 25-30 mox diffluentibus, bisporis; sporidiis subcylindraceis 30-40 \approx 10-14, 4-septatis ad septa constrictulis rectis v. leviter curvulis, loculis grosse 1-guttulatis, fuligineis.

Hab. ad folia viva *Lithrææ brasiliensis* in dumetis pr. Santa Ana Misiones, Rep. Argentina Amer. austr. (A. LLAMAS). — Ad apices setularum sæpius conidia fusideo-clavulata, 40-50 \times 7-10, 3-4 septulata olivacea inveniuntur.

8. *Meliola quercinopsis* Rehm — Syll. XVI, p. 1125, — var. me- 3463
galospora Rehm, Ascom. Exsicc. fasc. 46, n. 1899, Ann. Mycol. (1910) p. 303. — Hyphis 3 μ . cr.; conidiis fusoides, longe pedicellatis; 5-cellularibus, 20-40 \times 5-8; peritheciis glabris, setulis 200 \times 5-8, brunneis, simplicibus, septatis basi ornatis; ascis 90-100 \times 30, octosporis; sporidiis oblongo-clavatis, 35-40 \times 10-12, tristichis, brunneis, 5-locularibus, cellulis extimis minutis, 5-guttulatis.

Hab. in pagina sup. foliorum *Lithrææ brasiliensis*, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

9. *Meliola Mangiferæ* Earle, Bull. of the New York Bot. Gard (1904) 3464.
 p. 307. — Amphigena, pelliculas nigras, dense velutinas orbiculares, 6-10 mm. diam., demum confluentes formans; mycelii hyphis copiosis intertextis, atro-fuscis 10 μ . cr., cellulis 25-30 μ . long.; hyphopodiis capitatis inæqualiter clavato-oblongis, alternis, 25 \times 12-14, cellula basali 6-7 μ . longa, cellula superiore cylindræa subflexuosa; hyphopodiis mucronatis raris subconicis, obtusis, sæpe flexis et irregularibus 25 μ . long.; setis copiosis 600-700 \times 11, opacis, sursum tenuatis et sæpe breviter 2-5-dentatis; peritheciis globosis, 200 μ . diam., extus colliculosus; ascis typice 2-sporis, evanescentibus; sporidiis 4-septatis, constrictis, crasse cylindræis, atro-fuscis, 50-55 \times 18-22.

Hab. in foliis *Mangiferæ indicæ* in horto Castleton Jamaicae (EARLE) et Porto Rico (HELLER). — Peritheciis colliculi ex peculiaribus cellularum aggregationibus formantur.

10. *Meliola polytricha* Kalchbr. et Cke. — Syll. I, pag. 67. — var. 3465
flexuosisetæ Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 16. — A typo differt subiculo sat villosa, setulis dense flexuoso-subcircinatis aterrimis, opacis, basim et apicem versus attenuatis; sporidiis subcylindræis 45 \times 18 \times 12, 4-septatis.

Hab. ad folia viva *Schini* cujusdam in Horto botanico paulistano, Brasilia (USTERI).

11. *Meliola glabriuscula* Spegazz., Fungi Paulist. Rev. Mus. La Plata 3466
 t. XV, p. 15. — Subiculo tenuissimo plagulas sæpius confluentes ac fere totum epiphyllum obtegentes efficiente; hyphis subopacis crassis 6-8 μ . cr., rectis sæpius oppositis ampulluliformibus et piriformibus magis numerosis commixtis nigris fere opacis, setulis

paucis circa singula perithecia radiantibus, molliusculis apice integris, 50-150 \times 6, pellucidis; peritheciis subverrucosis astomis nigris, 150-250 μ . diam., semper glaberrimis; ascis ellipsoideis 45-60 \times 20-30, 2-4-sporis, breviter crasseque pedicellatis; sporidiis subcylindraceutis utrinque obtuse rotundatis, 5-locularibus, ad septa leniter constrictis, levibus, subopacis fuliginis, rectis v. leniter subcurvulis e latere sat compressis, 35-40 \times 16-17 \times 12.

Hab. ad folia viva valde coriacea nitidissima (Photiniæ?), Agua branca, Isolamento prope Sao Paulo Brasiliæ (USTERI). — Species *Meliola brasiliensis* Speg. peraffinis sed glabritie, hypothallis microthyriiformibus deficientibus setulisque mycelialibus sat distinctis dignoscitur.

12. *Meliola valdiviensis* Speg., Fungi Chilenses (1910) p. 26, cum 8467 icon. — Subiculo orbiculari tenuiter membranaceo calvo, hyphis oppositè ramosis hyphopodiis oppositis v. alternis obovatis gibbosis v. sublobulatis; peritheciis globosis in quaque macula 3-8 insidentibus, 200-300 μ . diam., non collabescentibus; ascis bisporis 60 \times 34; sporidiis obtusis ellipsoideis, 4-septatis e latere non v. vix compressis, 48-52 \times 20.

Hab. copiose in foliis Eugeniæ cujusdam, Bahia de Corral Chile Amer. austr.

13. *Meliola Helleri* Earle, Bull. of the New York Bot. Gard (1904) 8468 p. 307. — Amphigena, pelliculas tenues subindefinitas nigras, 3-6 mm. diam. formans, sæpe plus minus confluentis; mycelio intertexto pallide fusco, hyphis 7 μ . cr., cellulis 15-18 μ . long., hyphopodiis capitatis alternis v. unilateralibus, regularibus, oblongis, 16-18 \times 8, cellula basali curta, 5 μ ., superiori cylindraceuta; hyphopodiis mucronatis parvis, oppositis v. sparsis, subconicis v. ampulliformibus, sæpe irregularibus, truncatis, 18-20 μ . long.; setis parvis 350-450 \times 8, rectis, sursum tenuatis, apice breviter bifidis v. acute 2-pluridentatis; peritheciis globosis 150-200 μ . glabris, ex cellulis 8-10 μ . diam. formatis; ascis evanidis; sporidiis 4-septatis, atro-fuscis, cylindraceutis, fortiter constrictis, obtusis, 35-40 \times 11-13.

Hab. in foliis plantæ arboreæ cujusdam forte Myrtaceæ, Porto Rico (HELLER).

14. *Meliola falcatiseta* Speg., An. Mus. Nac. Buenos Aires t. XIX 8469 (1909) p. 327. — Plagulis sæpius epiphyllis 0.5-2.5 mm. diam., orbicularibus subcrustaceis arcte matrici adnatis, grosse denseque villosolanatis, nigris; hyphis mycelialibus 10-12 μ . cr. subopace fuliginis, hyphopodiis 20 \times 15, creberrimis ornatis, setulis erectis

arcuatis acutis 250-500 \times 10-12, subopacis 1-3-septatis apice acutissimis atque subpellucidis arcuatis; peritheciis udis globulosis villosis absconditis papillulosis, 120-150 μ . diam., siccis corrugato-collabescens glabris atris, contextu submembranaceo grosse parenchymatico atro donatis; ascis paucis ellipsoideis 60 \times 30-35 brevissime crasseque pedicellatis, paraphysatis; sporidiis cylindratis 44-48 \times 14-16, rectis v. leniter curvulis, utrinque obtusis, 4-septatis ad septa coarctatulis, loculis sæpius grosse guttulatis, fuliginosis.

Hab. ad folia viva *Moyæ ferocis*. (e Celastraceis) Saucelito, Salta Rep. Argentina, Amer. austr.

15. *Meliola zig-zag* Berk. — Syll. I p. 67 — var. *discreta* Starb., 3470 Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) pag. 7. — Peritheciis discretis siccitate collapsis, setis rarissime septatis, leniter undulatis, fere plane, acumine excepto, impellucidis, acutatis, rarissime obtusis, 150-250 \times 8-10; ascis 51 \times 32; sporidiis 44-48 \times 15-18; conidiis nullis.

Hab. in foliis *Cinnamomi* (?), Rio Grande do Sul, Brasilia (MALME). — Conidiis nullis, situ et forma peritheciolorum differt.

16. *Meliola heteroseta* v. Höhn., Fragm. Mycol. VIII (1909) p. 13. 3471 Epiphylla, subrotunda, 6 mm. lata, tenuissima, adpressa; hyphis radiantibus digitato-ramosis, atro-viridaceo-brunneis 12 μ . cr.; articulis 28 μ . long.; hyphopodiis unilateralibus v. alternis, bicellularibus, ovato-oblongis, 16-20 \times 11-12; hyphopodiis phialiformibus paucis; setis copiosis, nigris, rigidis, opacis, biformibus: mycelialibus 180-220 \times 8-10, furcatis, perithecialibus cuspidatis 450 \times 12, supra 3-5 μ . cr.; peritheciis sparsis, globosis, dein profunde umbilicatis, grosse cellulosis, ostiolo indistincto; ascis 2-3-sporis, ellipsoideis, basi acutatis, 60-65 \times 26-33, pseudoparaphysibus (ascis abortivis?) intermixtis 100 \times 25; sporidiis parallelis atro-brunneis, oblongis, 5-cellularibus, ad septa valde constrictis, utrinque rotundatis, 44-52 \times 18-22.

Hab. in foliis *Paratropiæ* in silvis Tijbodas Javæ.

17. *Meliola pectinata* v. Höhn., Fragm. Mycol. VIII (1909) p. 14. 3472 — Tenuis, nigricans, rotunda v. oblonga, mm. aliquot lata; hyphis vinoso-brunneis, 8-10 μ . cr., septatis, articulis 24-28 μ . longis, sæpe opposito-ramosis, hyphopodiis copiosis, oppositis; hyphopodiis capitatis 20-24 \times 13-16, bicellularibus, cell. inferiori brevi, superiori rotundato-ovoidea, medio poro minuto prædita; hyphopodiis phialiformibus 17-20 \times 8-10, continuis; setis nigris, rigidulis, rectis, acutis; mycelii setis 260-420 \times 12; peritheciis setis 250 μ . long.; peri-

theciis sparsis, globosis, nigris, grosse cellulosi, astomis, 260-300 μ . diam.; ascis ellipsoideis, bisporis, 80 \approx 36-40; sporidiis oblongo-ellipsoideis, utrinque rotundatis, 5-cellularibus, ad septa constrictis, 60 \approx 24, atro-brunneis, pellucidis.

Hab. in foliis vivis *Paratropiæ* sp., socia *Mel. heteroseta* in silvis Tijbodas Javæ. — *Meliolæ Montagnei* affinis.

18. **Meliola Compositarum** Earle, Bull. of the New York Bot. Gard. 3473 (1904) p. 306. — Epiphylla, pelliculas minutas, 1-2 mm. lat. nigras v. atro-brunneas, sparsas v. subconfluentes formans; hyphis 7 μ . cr., articulis 20-30 μ . longis; hyphopodiis capitatis alternis 25-30 μ . long., cellula basali 8 μ . longa, superiore inæqualiter lobata, 15-20 μ . lat., interdum elongata et 1-septata; hyphopodiis mucronatis oppositis ampulliformibus; setis nullis; peritheciis globosis, 200 μ . diam., apice appendiculis rigidis 6-12 coronatis, appendiculis 80-100 \approx 20 pallidis, apice obtuso abrupte uncinato et saturatiore; ascis sæpius bisporis, mox evanidis; sporidiis cylindraceis v. anguste ellipsoideis, fuligineis, 4-septatis, constrictis obtusis, 45 \approx 14-16.

Hab. in foliis Willughbææ sp. et Eupatorii sp. Porto Rico et Jamaica (HELLER et EARLE) et Compositæ sp. in Brasilia (ULE).

19. **Meliola compacta** Earle, Bull. of the New York Bot. Gard. (1904) 3474 p. 306. — Amphigena, crustulas compactas, nigras 1-2 mm. latas formans; hyphis atro-fuscis 7 μ . cr., dense confertis et agglutinatis; setis mycelii nullis; hyphopodiis capitatis numerosis, crebris, 18 μ . longis, cellula basali 8 μ . longa, superiore globosa 10 μ . diam.; hyphopodiis mucronatis non visis; setis peritheci sparsis 70-100 \approx 6, obtusis, sæpe abrupte 20 μ . infra apicem curvatis, sursum subhyalinis; peritheciis globosis 200-225 μ . diam.; ascis ellipsoideis 4-sporis; sporidiis cylindraceis, compressis, obtusis, 4-septatis, constrictis, atro-fuscis, 40-45 \approx 14 \approx 10.

Hab. in foliis *Crossopetali pallentis*, Porto Rico (HELLER).

20. **Meliola Usteriana** Rehm, Ann. Mycol. VII (1909) p. 529, Ascom. 3475 Exsicc. fasc. 45, n. 1875. — Mycelio plerumque epiphylo, primitus maculas orbiculares, tenuissimas, arachnoideas, fusco nigrescentes, 1-4 mm. lat. formante, dein totum folium obtegente et nigro-viridulo-decolorante; hyphis mycelii plerumque curvatis, ramosis, septatis, subfuscis, 4-5 μ . lat.; hyphopodiis plerumque alternantibus, 2-cellularibus, cellula superiori subglobosa, inferiore

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brevissima, 12-14 \approx 8-10, creberrimis; hyphopodiis mucronatis oppositis, pallidioribus 15 \approx 5; setis nullis; peritheciis primitus in centro macularum 5-8 arcte congregatis, in mycelio effuso plane dispersis, sessilibus, globulosis, glabris, atris, astomis, e cellulis magnis parenchymatice contextis, cellulis imprimis ad basim conoideis prominentibus, 150-180, siccis umbilicatis verruculosisque; ascis ellipsoideis 30-40 \approx 20, 2-4-sporis; sporidiis oblongis, obtusis, 4-septatis, ad septa subconstrictis, fuscis, cellulis apicalibus 8 μ . longis, inde 3 mediis brevioribus, 30-33 \approx 12-14.

Hab. ad folia Cordiæ, Avenida Paulista, Sao Paulo Brasilie (USTERI). — *Mel. conglomeratæ* et *arachnoideæ* affinis, sporis minoribus differt. Diagnosis hujus speciei, ab ipso Rehmio data in Ann. Mycol. (1907) p. 523, satis differt.

21. *Meliola Hyptidis* Syd., Ann. Mycol. VIII (1910) p. 36. — Mycelio epiphylo, laxissimo ex hyphis repentibus, varie ramosis fuscis septatis 4-5 μ . crassis hyphopodia alternantia pedicellata ovata vel ovato-globosa 8-10 μ . longa, gerentibus composito; setulis mycelii erectis, rectis, septatis, simplicibus, fuscis, usque 250 μ . longis, 4-6 μ . latis; peritheciis globosis, 85-120 μ . diam., tuberculatis; ascis numerosis, oblongatis, 35-50 \approx 20-30, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, olivaceo-brunneis, 26-32 \approx 9-11.

Hab. in foliis Hyptidis suaveolentis, Lamac, Bataan prov. Luzon, Philipp. (E. D. MERRILL).

22. *Meliola caymanensis* Ell. et Ev., in Millsпах, Public Field Columbian Mus. Bot. ser. II (1900) n. 1, p. 15, t. 49. — Epiphylla; mycelio maculas minutas, vix 1 mm. diam., subrotundas, nigras formante, ramoso-subreticulato; ramis 6-7 μ . diam.; hyphopodiis capitatis globosis, subsessilibus, 8 μ . diam.; hyphopodiis mucronatis ampulliformibus sursum cylindraceo-productis, 7-8 μ . long., non copiosis; peritheciis 200-250 μ . diam., collabescentibus, 2-6 in quaque macula mycelica; ascis obovatis, subsessilibus, 75-85 \approx 20-25, bi-quadrifloris; sporidiis subfasciculatis, oblongo-cylindraceis, 4-septatis, leviter constrictis, 25-30 \approx 11-13.

Hab. in foliis Pharbitis cathartice in insula Grand Cayman Antillarum.

23. *Meliola Psychotriæ* Earle, Bull. of the New York Bot. Gard. (1904) p. 308. — Amphigena, sæpius epiphylla, pelliculas orbiculares 1-3 mm. diam. formans; mycelio copioso, hyphis fuscis, 7-8 μ . cr., cellulis 25-35 μ . longis; hyphopodiis capitatis alternis,

mycelio valde adpressis, $25 \approx 10-11$, cellula basali $7-8 \mu$. longa; hyphopodiis mucronatis oppositis, $16-20 \mu$. long., subconicis, sæpe curvis apice truncatis; setis erectis, $250-300 \approx 8$, frequentibus, sursum obtuse tenuatis et pallidioribus; peritheciis minutis, $125-150 \mu$. diam., subcollabentibus, ex cellulis irregularibus $7-8 \mu$. diam., conflatis; ascis ellipsoideis, bisporis; sporidiis 4-septato-constrictis, ellipsoideis, pallide fuscis, utrinque obtuse tenuatis, $35 \approx 13-14$.

Hab. in foliis Psychotriæ sp. et Erithelis fruticosæ Porto Rico (HELLER). — *M. ambigua* affinis.

24. *Meliola longiseta* v. Höhnelt, Fragm. z. Mykol. III, Sitzb. k. Ak. 8479 d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 100. — Mycelio hypophyllo, tenuissimo, laxo, 1 cm. diam., subrotundo; hyphis tortuosis, atro-vinosis, 8μ . diam.; hyphopodiis 2-3-cellularibus alternis, breve capitatis $28 \approx 12$, cellula superiori ovoideo-globosa, varie verrucosa; hyphopodiis mucronatis nullis; setis sparsis atris, opacis, rigidis $800-1000 \approx 10-16$; peritheciis sparsis, globosis, verrucosis, 200μ . diam., ascis 2-3-sporis, ovoideis, tenue tunicatis, $50 \approx 20$; sporidiis æqualiter 5-ocularibus, atro-brunneis, oblongo-ellipsoideis, ad septa leviter constrictis, $40-44 \approx 18$.

Hab. in foliis Psychotriæ sp. in insula Samoa (Doct. RECHINGER).

25. *Meliola Alstoniæ* Koord., Botan. Untersuch. (1907) pag. 170. — 8480 Maculis mycelii hypophyllis, rotundato-angulatis v. effuso-confluentibus, atris, setulosis, hyphis repentibus ramosissimis, brunneo-fuscis, pseudopodiis alternantibus ovoideos-clavatis, fuscis, apice obtusis, setulis indivisis, erectis, apice acuminatis, fusco-atris, 180μ . longis, continuis; peritheciis sparsis globosis, apice rotundatis $127-135 \mu$. diam.; ascis 2-4-sporis clavatis, apice haud incrassatis, $80-90 \approx 30-40$; ascosporis fuscis, oblongis, utrinque rotundatis, 2-4-septatis, $32-35 \approx 14-14.5$ ad septa constrictulis; paraphysibus nullis; conidiis cylindraceo-clavatis, apice rotundatis, fumigatis, $30 \approx 7$, circ. 9-septatis.

Hab. in foliis vivis Alstoniæ scholaris prope Sapuram prov. Kedu ins. Javæ (KOORDER).

26. *Meliola buddleyicola* P. Henn., Hedwigia XLIV (1905) p. 61. — 8481 Maculis mycelii epiphyllis, gregarie sparsis, rotundato-angulatis, atris, 1-2 mm. diam.; hyphis repentibus atro-fuscis, septatis, ramosis, pseudopodiis alternis, ovoideis, 1-septatis, $12-18 \approx 7-8$ vel corniformibus, $15-22 \approx 4-6$, atro-fuscis; peritheciis sparsis v. cæspitosis, inermibus, subglobosis in sicco collabescentibus, atro-fu-

scis, membranaceo-cellulosis, pertusis, 100-160 μ . diam.; ascis ellipsoideis v. ovoideis 2-4-sporis; sporidiis cylindraceis utrinque obtusis, 4-septatis, constrictis, atro-fuscis, 25-32 \times 7-10.

Hab. in foliis *Buddleiæ* sp. Tarapoto Amazoniæ Brasil. — *Mel. inermi* cognata.

27. *Meliola funerea* Mac Alp., Descr. New Austral. Fungi, I, p. 104, 3482 t. X, f. 1-6 (Proceed. Linn. Soc. N. S. Wal. 1896). — Mycelio maculiformi plerumque epiphylo, velutino, nigro, suborbiculari, sæpe cunfluente, valde conspicuo; hyphis ramoso-intricatis, 8 μ . cr., ex hyphis hyalinis delicatis adpressis, 2 μ . cr. orientibus, setulis fuliginosis, rigidis, septatis, curvis, 11 μ . cr., apice acutatis; peritheciis globosis atro-purpureis, minute verrucosis, 310-350 μ . diam.; ascis pro more 4-sporis ovato-fusoideis 90 \times 45; sporidiis allantoideis v. ellipsoideis, 3-septatis, ad septa constrictis, 54-62 \times 18-20, e flavido brunneis.

Hab. in foliis *Grevilleæ* robustæ, N. South Wales Australiæ (MAIDEN).

28. *Meliola patella* Theiss., Broteria (1910) p. 26. — Plagis tenuibus, 3483 nigris, applanatis, 3-5 mm. diam., epiphyllis, discretis; hyphis radiantibus, stipatis, opposito-ramosis, 7-9 μ . cr.; hyphopodiis mucronatis oppositis, ampulliformibus in collum breve protractis; hyphopodiis capitatis magnis, distantibus, 23-32 \times 17-20; setis nullis; peritheciis glabris, applanato-patellaribus, orbicularibus, margine acuto elevato, centro subumbonatis, numerosissimis, 120-180, contextu radiato microthyriaceo (non vero dimidiatis) poro centrali præditis; ascis ovoideis, 2-3-sporis; sporidiis rectis v. curvulis, 4-septatis, cellulis æqualibus, fuliginosis, ad septa constrictis, utrinque rotundatis (dimensionibus non indicatis).

Hab. in foliis *Sebastianiæ* sp. et *Schini* sp., Rio Grande do Sul Brasilæ.

29. *Meliola Thomasiana* Saccardo, Fungi aliquot africani, Bol. Soc. 3484 Broteriana v. XXI (1904-1905) p. 4. — Peritheciis in soros minutos, subcirculares, gregarios nigricantes, 1 mm. diam., junctis, globulosis, astomis, 200 μ . diam., glabris, demum vertice irregulariter ruptis, setulis filiformibus, acutis, septulalis, atro-fuliginosis, 280 \times 8-9, basi parce cinctis; contextu e cellulis subglobosis, 11-14 μ . diam., fuliginosis formato; subiculo repente ad soros limitato, filiformi, septato, ramoso, hyphopodiis capitatis, eximie 2-4-lobulatis, rufo-fuliginosis copiosis prædito; ascis... jam resorptis; spo-

ridiis oblongo-cylindræis, utrinque rotundatis, 3-septatis, leviter constrictis, atro-fuligineis, 34-36 \approx 14-14,5.

Hab. in foliis caulibusque vivis *Elatostematis angolensis* ex *Urticaceis*, in ins. S. Thomé, alt. 135 m. (A. MOLLER). — Affinis *M. gangliferæ*, a qua differt mycelio limitato et maculas effusas haud formante, sporidiis brevioribus etc.

30. *Meliola pennata* v. Höhn., *Fragm. Mykol.* VII (1909) p. 45. — 3485
Subrotunda; epiphylla, 3-6 mm. diam., confluens; hyphis sterilibus 8-10 μ . cr., arcte adnatis duplicato pennato-ramosis, ramis pro more oppositis; hyphopodiis alternis, 32-36 \approx 16, capitulis oblongis, sæpe curvis; setis nigris, acute tenuatis, rigidis, basi 9-10 μ ., sursum 8 μ . cr.; setis perithecialibus 200-300 μ . long.; mycelialibus 360-650, copiosis; peritheciis astomis, apice nigris, verruculosi, globosis, non collabentibus, sparsis, 160-200 μ . diam.; ascis ovoides; sporidiis oblongo-cylindræis, 4-septato-constrictis, atro-brunneis 50-55 \approx 23, raro 24 \approx 18.

Hab. in foliis coriaceis arboris ejusdam, Buitenz. ins. Javæ.

31. *Meliola acamptinga* Spegazz., *Fungi Paulist.*, *Rev. Mus. La Plata* 3486
t. XV (1908) p. 15. — Subiculo plagulas hypophyllas irregulariter orbiculari-angulosas laxissime reticulatas efficiente; hyphis subopacis crassis 6-8 μ . cr., rectis opposite ramosis dense hyphopodiatis, hyphopodiis circa perithecia ampulluli- v. spiniformibus, 20-25 \approx 6-7, ambitu sæpius clavulatis obtusis, 20 \approx 9, atris, setulis paucis circa perithecia tantum evolutis, filiformibus, 500-1500 \approx 10 opacis, basi leniter incrassatulis; peritheciis 200-250 μ . cr., subverruculosi, astomis, membranaceis, grosse celluloso-parenchymaticis, nudis; ascis ellipsoideis 60 \approx 30, brevissime pedicellatis, mox diffluentibus, bisporis; sporidiis subcylindræis, utrinque obtuse rotundatis, 5-locularibus ad septa leniter constrictis, levibus, subopace fuligineis e latere leviter compressis, 45-50 \approx 18 \approx 14.

Hab. ad folia coriacea viva arboris ignotæ, Morca perto de Sao Paulo Brasilæ (USTERI).

32. *Meliola Mitchellæ* Cooke — *Syll.* I, pag. 64. — var. *orthopus* 3487
Theiss. Broteria (1910) p. 34. — Maculis obsoletis, amphigenis, 1-3 mm. diam., hyphis gracilibus, brunneis, opposito-ramosis, 6-8 μ . cr., articulis elongatis; hyphopodiis capitatis alternis, brevissime stipitatis, cylindræis, 18-22 \approx 8-9; setis acicularibus rectis; nigro-brunneis, 250-300 \approx 8-9, apice 2-3 μ . cr., simplicibus; ascis bisporis, ovoides, v. ellipsoideis; sporidiis 4-septatis, leniter constrictis, cellulis extimis hemisphæricis, 44-50 \approx 16-20.

Hab. in foliis plantæ indet. socia *Seynesia paraguayensi*, Rio Grande do Sul Brasiliæ.

33. *Meliola dracænica* Pat. et Har., Bull. Soc. Mycol. Fr. XXIV 3488 (1908) p. 14. — Maculis amphigenis, atris, facile dilabentibus, tomentosis; peritheciis globosis, atris 300 μ . circ. cr.; sporidiis rectis, cylindræis, brunneis, utrinque obtusis, 4-septatis, constrictis, 46 \times 16; setulis mycelii erectis, atris, gracilibus, apice bis v. ter furcatis, ramulis suberectis v. patentibus, bi-tridentatis; hyphopodiis stipitatis, alternis, rotundatis, 20 μ . long.

Hab. in foliis *Dracænæ* spec., Brazzaville, Congo (A. CHEVALIER).

34. *Meliola circinans* Earle, Bull. of the New York Bot. Gard. (1904) 3489 p. 304. — Pelliculis irregularibus, velutinis, 5-10 mm. diam. v. late confluentibus, a folio facile secedentibus; mycelio copioso, atro-fusco, anastomotico-ramoso, non conglutinato, subinde noduloso, inæquali, hyphis 6-7 μ . cr., cellulis 16-20 μ . long.; hyphopodiis capitatis copiosis, cylindræis, rectis, subinde lobatis 16-20 \times 8, cellula apicali subinde arcte inflexo-recurva (circinata) et tunc 16 μ . cr.; hyphopodiis mucronatis raris, ampulliformibus, 16-20 \times 6; setis mycelii copiosis nigris, rectis, cuspidatis, 400-600 \times 8-9; setis perithecialibus 6-8 v. pluribus atro-fuscis, curvatis, obtusulis, 130 \times 6; peritheciis globosis, minutis, 120-150 μ . diam. a-stomis; ascis mox evanidis sporidiis cylindræis, utrinque apiculatis, pallide fuscis, diaphanis, 4-septatis, constrictis, 40-45 \times 12.

Hab. in foliis *Rhynchosporæ* aureæ, Porto Rico (HELLER) *Rhynch. dodecandræ* et *Cyper* sp. in Florida (STRUGIS, NASH) et *Cladii* effusi, Ocean Springs Miss. et Florida (TRACY). — Ab affini *Meliola Cyperi* differt sporidiis subapiculatis nec obtusis, hyphopodiis apice incurvo-circinatis etc.

35. *Meliola substenospora* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 3490 CXVIII, Abt. I (1909) p. 317. — Subiculo sparso, nigro, crustaceo elliptico sæpius acute limitato 1-4 mm. longo, ex hyphis atro-brunneis dense reticulato-ramosis rigidulis septatis, 4-8 μ . cr.; hyphopodiis capitatis copiosis bicellularibus 24 \times 13-16, capitulo rotundo anguloso; hyphopodiis ampulliformibus parvis sæpe unilaterialibus patentibus 20 \times 8, obliquis, supra obtusis, setis mycelii tantum præsentibus usque ad 360 μ . long., copiosis, opaco-atris, acutis, subinde sursum pallidioribus, septatis, basi 12 μ . latis; hyphis conidiophoris nunc parvis nunc copiosissimis, rectis, diaphanis brunneis, deorsum 5-6-septatis, sursum continuis et subtorulosis

220-340 \approx 5-6; peritheciis parvis v. copiosis, globosis, nigris astomis, 200 μ . lat., ascis mox diffuis, ovoideis bi-tri-sporis; sporidiis oblongo-cylindræis, utrinque leniter acutatis sed rotundatis, 5-cellularibus leniter constrictis.

Hab. in foliis adhuc vivis Phragmitis sp. in Horto Bot. Buitenzorg Javæ. — Affinis videtur *M. stenosporæ*.

36. *Meliola Hercules* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII 3491 Abt. I (1909) p. 316. — Subiculo epiphylo, sparso, rotundato v. oblongo 2-5 mm. lato, nigro, laxo ex hyphis atro-brunneis septatis solidiusculis dendritico-ramosis 8 μ . cr. formato; hyphopodiis capitatis bicellularibus 20-30 \approx 15, capitulo inæqualiter globoso-angularulo; hyphopodiis ampulliformibus, parvis 15- \approx 8, setis perithecialibus nullis, setis mycelicis copiosis 130-180 \approx 10-12 sursum crassioribus opace atris, bi-tri-septatis, sursum usque ad 30 μ . cr., peritheciis paucis, globosis, nigris 160-200 μ . diam., ex cellulis hemisphæricis prominulis 16 μ . diam., orientibus; ascis ovoideis; sporidiis terno-quaternis, diaphane brunneis, 5-cellularibus ad septa constrictis, 42-44 \approx 12-16.

Hab. in pagina sup. foliorum Graminis (Anthistiria?) prope Buitenzorg Javæ. — Affinis *M. clavulatae* et *M. Panici*.

Sect. 5. Scolecosporæ.

OPHIOMELIOLA Starb. — Syll. XVI p. 416.

1. *Ophiomeliola Usteri* Spegazz., Fungi Paulist. Rev. Mus. La Plata 3492 (1908) t. XV, p. 17. — Peritheciis subiculo tenui membranaceo insidentibus, laxe gregariis, lageniformibus, glabris, atris, 100-120 μ . cr., superne in ostiolum crassiusculum subcylindræum 40-50 \approx 35-45 apice subattenuatum denticulato-ostiolatum productis, contextu deorsum parenchymatico sursum prosenchymatico donatis; ascis utrinque attenuatis, apice rotundatis, basi crasse brevissimeque stipitatis 100-125 \approx 25-30, octosporis; sporidiis rectis vel leniter sigmoideis, ad septa validiuscule constrictis, 70-80 \approx 8-10, 14-16-septatis, olivaceis, loculis minute uniguttulatis.

Hab. ad folia viva Eugeniæ cujusdam, Ipiranga Moça Brasilia (USTERI).

PSEUDOMELIOLA Speg. — Syll. IX p. 938, XI p. 269, XVI p. 1127. 3493

1. ? *Pseudomeliola collapsa* Earle, Bull. of the New York Bot. Gard.

(1904) p. 309. — Mycelio hyphis tenuibus, agglutinatis, hyalinis, 2,5-3 μ . cr.; peritheciis dense aggregatis, integris, initio lenticularibus dein collabentibus, 100-120 μ . diam., conspicue ostiolatis, ex hyphis radiantibus, agglutinatis, dein crebro septatis, 4-5 μ . diam., formatis, ostiolo 8 μ . diam., margine appendicibus piliformibus, adpressis, radiantibus coronato; ascis obovatis, breviter stipitatis, 30-35 \times 12, aparaphysatis; sporidiis inordinatis, tereti-clavulatis, hyalinis, conspicue 3-guttatis, 12-14 \times 3.

Hab. parasitica in mycelio *Meliolæ torulosæ* et sp. ad folia *Piperis peltati* et *Mesosphærii capitati*, Porto Rico (HELLER). — Species quoad affinitates vere ambigua.

Sect. 8. Dictyosporæ.

CERATOCARPIA Roll. — Syll. XIV p. 474.

1. *Ceratocarpia Theobromæ* F. C. v. Faber, in Arbeit. K. Biol. Anst. 3494 Berl. VII (1909) p. 220. — Peritheciis minutis, globosis, astomis, parenchymaticis, 105 μ . latis, olivaceo-fuscis; ascis subglobosis, ovatis, breve stipitatis 30-60 \times 20, aparaphysatis, octosporis; sporidiis oblongis, transverse 2-6-septatis, constrictisque, primo hyalinis, dein melleis, demum olivaceo-fuscis, sæpe guttatis, rostello recto v. curvo plus minus longo utrinque præditis, 15-25 \times 12 (rostris exceptis).

Hab. in foliis *Theobromæ Cacao* ubi crustas crassas format, Camerun Africæ trop. — Aphides simul aderant copiosi. Sporidia typica muriformia a v. Faber non describuntur; an ergo species hujus generis?

PLEOMELIOLA Sacc. — Syll. I p. 70, XIV p. 17, XVII p. 554.

1. *Pleomeliola Karissæ* Bacc., Funghi Eritrea, Ann. Bot. v. IV (1906) 3495 p. 273, tav. X, fig. 10. — Mycelio amphigeno, crustaceo, atro, facile secedente; peritheciis atris, globulosis superficialibus v. immersis, glabris, rotundatis, 175-200 μ . diam. non umbilicatis; ascis numerosis octosporis 80 \times 14, clavatis, aparaphysatis; sporidiis fusculis, ovalibus vel ellipticis, oblique monostichis vel distichis, muriformibus, transverse quinqueseptatis, 31 \times 14.

Hab. in foliis *Karissæ* edulis ad scaturigines torrentis Mai-Amus pr. As-Nefas, Amasen Erythrææ (PAPPI).

ZUKALIOPSIS Henn. — Syll. XVII p. 554.

1. **Zukaliopsis paulensis** Rehm, Ann. Mycol. V (1907) pag. 522. — 3496

— Peritheciis in mycelio epiphylo hypharum, ramosarum, remote septatarum, 4 μ . cr., dilute flavidularum in sicco olivaceo, tenuissimo, longe effuso dispersis, sessilibus, globulosis, poro haud pertusis, membranaceis, dilute nigris, 250-300 μ . diam., in sicco umbilicatis, glabris; ascis ovalibus, crasse tunicatis, 40-45 \times 20-30; 8-sporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, transverse 3-7-9-septatis, cellulis modo singulis semel longitudinaliter divis, hyalinis, 25-30 \times 7-9, 3-stichis; paraphysibus vix distinguendis.

Hab. ad folia Davillæ? Sao Paulo, Brasilia (USTERI).

Trib. 5. Capnodieæ Sacc. ()*

CAPNODIUM Mont. — Syll. I p. 73, IX p. 438, XI p. 270, XIV p. 476, XVII p. 555.

I. Eu-Capnodium Sacc. Sporidia fenestrata.

1. **Capnodium cistophilum** (Fr.) Maire Bull. Soc. bot. Fr. LVI (1909) 3497

[edit. 1911] p. COLXVIII fig. 1. *Antennaria cistophila* Fr. System. mycol. III, p. 230. — Sacc. Syll. fung. I, p. 82. — Mycelio . . . Cfr. Syll. I. c. — Pycnidii versiformibus, oblongis, cylindraceis corniformibus, lageniformibus, brunneis, levibus, 100-200 μ . long., sporulis I ord. brevis ellipsoideis, pro more 1-septato-constrictis, rarius irregulariter 3-septato-muriformibus, 10-12 \times 6-7; sporulis II ord. oblongo-ellipsoideis 1-4-septato-muriformibus 13-17 \times 7,5-8, e latere 5-7 μ . cr.; peritheciis subglobosis, ellipsoideis, cylindraceis v. clavatis, isodiametrico-cellulosis, apice irregulariter dehiscentibus; ascis 8-sporis, paraphysatis, oblongo-clavatis, 40-50 \times 12; sporidiis distichis v. tristichis, oblongo-ellipsoideis, levibus, brunneis, 3-septatis, ad septum medium constrictis, addito plerumque septo longitudinali unico, 14-15 \times 5-6.

(*) Quomodo cl. G. ARNAUD (Ann. Ecol. nat. d' Agric. de Montpell. IX (1910) p. 240), nullius momenti habito mycelio fumagineo deteribili tam peculiari et tam perspicuo, censeat tribum *Capnodiearum* delere et ejus elementa cum Sphaeriaceis fundere est res omnino stridens et prope incredibilis.

Hab. in ramis Cistorum e. g. *C. polymorphi* socio Coccide *Lecanodiaspide sardoa*, in Tunisia.

2. *Capnodium stellatum* Bernard, Bull. Dép. Agric. Ind. Néerl. XI 3498 (1907) p. 1, f. 1-24. — Pycnidiis (?) stellato-appendiculatis, appendiculis apice digitato-incisis præditis, magnitudine variis, matriçi arcte adpressis, non verticalibus, 0,2-0,5 mm. long.; peritheciis ex pycnidii parte superiori hinc inde generatis inæqualiter globulosis; ascis ellipsoideis, obtusis, subsessilibus 45-46 × 23-24; sporidiis hyalinis dein brunneis, ellipsoideis, 17-22 × 11-14, 3-4-septato-muriformibus, ad septa non v. vix constrictis.

Hab. in foliis Citri sp. in ins. Java. — Vix *Capnodium*; cum gen. *Actinomma* et *Atichia* comparandum.

3. *Capnodium minimum* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3499 p. 399. — Hyphis atro-olivaceis, crebrò septatis, crasse tunicatis, 4-7 μ . cr., varie flexis; peritheciis conicis v. phialiformibus, nigris, confertim aggregatis, 80-150 × 45-70, atro-castaneis, grosse cellulosis, rostellatis; ascis ovoideis, 55 × 27, octosporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, 22-29 × 9, olivaceo-brunneis, 4-5-septatis et verticaliter incomplete 1-septatis, ad septa, præcipue medium, constrictis.

Hab. in foliis petiolisque *Potentillæ speciosæ* pr. Stirnido Montenegro.

4. *Capnodium Acokantheræ* Bacc., Funghi Eritrea, Ann. Bot. v. IV, 3500 (1906) p. 273, tab. X, fig. 3. — Mycelio atro, crustoso, epiphyllò et ramulos ambiente; hyphis repentibus, moniliformibus, interdum in articulos 17 × 10 secedentibus, conidia cladosporioidea uni-triseptata gerentibus; peritheciis corniculatis, simplicibus, 210 μ . altis, basi ventricosis, 72 μ . latis, ore setulis hyalinis, erecto-patentibus 17 μ . longis coronato; ascis obovatis sessilibus 50 × 20; sporidiis olivaceis 2-5-locularibus; loculis sæpe transverse vel longitudinaliter septatis, 13-17 × 7.

Hab. in foliis *Acokantheræ Dorfelsii* juxta rivulum are-scentem pr. Medrigien Erythrææ.

II. *Capnodina* Sacc. Sporidia hyalophragmia.

5. *Capnodium capsuliferum* Rehm, Ascom. exsicc. n. 1735 et Ann. 3501 Mycol. V (1907) p. 468. — Mycelio epiphyllò latissime extenso, pannoso, atro; hyphis primariis subcurvatis, septatis, subhyalinis, repentibus, simplicibus v. ramosis; secundariis exsurgentibus, re-

ctangulo- interdum stellato-ramosis, apice acutatis, fusco-aureis, 5-7 μ . cr., cellulis subrotundis, ad septa valde constrictis, vix guttulis, scabriusculis; hyphis fertilibus erectis, plerumque simplicibus, 50-150 μ . long., ex articulis oblongis, 20 \approx 10 fuscis compositis, ad septa non constrictis, apice perithecium globosum, dein piriforme sursum angustato-truncatum, demum fimbriato-apertum, fuscum, glabrum, 30-50 \times 20-35 ferentibus; ascis clavatis, 35-40 \times 18, octosporis; sporidiis oblongis, utrinque rotundatis. 3-septatis, rectis curvulisve, hyalinis, 18 \approx 5; paraphysibus non observatis.

Hab. ad folia Tillandsiæ in Horto bot. Sao Paulo Brasiliæ (NOACK). — Occurrunt in mycelio cellulæ nonnullæ fusco-umbri-næ, 12-15 μ . lat., conidia hyalina, oblonga, 1,5 \approx 1 includentes.

6. *Capnodium Usterii* Rehm, Ann. Mycol. V (1907) p. 521. — My- 3502
celio primario epiphylo, crustam nigram tenuem ex hyphis conglutinatis + cellulis 10 \times 4 - fusciculis compositam, late effusam formante, hyphis fuscis simplicibus secundi ordinis, cellulis longioribus, 4-5 μ . lat., demum in filamenta erecta, - 200 μ . long., ad basim c. 30 μ . lat., versus apicem acutata, prosenchymatice conglutinata abeuntibus, rarius simplicibus, septatis, obtusis, fuscis, subramosis, cellulis 15 \approx 9, guttulas 2 oleosas includentibus; filamentis erectis secundi ordinis, sæpe hyphis divergentibus subscabris, ad apicem sæpe hyphis hyalinis divergentibus; peritheciis in latere filamentorum plerumque singularibus vel ad apicem 2-3 coacervatis, 30-130 \times 30-40, stipitatis, elliptico-ovalibus, ad apicem subobtusis, glabris, parenchymatico-fusco-contextis; ascis ellipticis 30-35 \times 9-10, 8-sporis; sporidiis fusiformibus, 3-septatis, rectis, 12-14 \times 3-3,5, hyalinis, distichis; paraphysibus?

Hab. in foliis Myrtaceæ, Sao Paulo Brasiliæ (USTERI). — Ex apice perithecorum hinc inde evadunt conidia globulosa, hyalina, 3 μ . lat. In mycelio conspicua conidia triposporioidea, quaque parte c. 90 \approx 10 e cellulis fusciculis 7-10 composita. *Capn. pelliculo* affine sed distinctum.

III. Species dubiæ.

7. *Capnodium hirtum?* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3503
t. XV, p. 17 (1908). — Subiculum tenuiter subcrustaceum membranaceum, dense velutino-hirsutum, nigrum; peritheciis dense constipatis polymorphis 150-500 \times 50-70 cylindræis v. obclavatis, simplicibus v. ramosis, ubique hyphis brevibus patulis laxè adspersis,

15-25 \approx 3-5; contextu breviter prosenchymatico olivaceo fusco; ascis sporisque desideratis; (tamen ob perithecia hirtula species bene distincta videtur).

Hab. ad folia viva Myrtaceæ cujusdam, Ipiranga, Cambucy Brasilia (USTERI).

8. **Capnodium ? Casuarinæ** Mac Alp. Austral. Fungi Dec. I-II, p. 374, 3504 (Proceed. Linn. Soc. New S. Wal. 1902). — Crustas fuligineo-nigras, ramulos totos obducentes formans, non facile secedens; hyphis repentibus septatis, ramosis, fuliginis, firmis, crasse tunicatis; ceratopycnidiis flavido-olivaceis v. virentibus, valde elongatis, versiformibus, varie ramosis, curvis, hyphis brunneis obductis, modo basi inflatis et sursum tenuatis, modo æqualibus, ostiolo minuto apice dehiscentibus; sporulis minutis, ovoideis, hyalinis, 3 \approx 1.5.

Hab. in ramis ramulisque Casuarinæ torulosæ Richmond River N. S. W. Australiæ (BAKER).

LIMACINIA Neger — Syll. XIV p. 474, XVI p. 1127, XVII p. 556. — Sec. cl. MAIRE *Morfea* Roze (aptius *Morphea*) in Bull. Soc. bot. Fr. XIV (1867) p. 21, est eadem res ac *Limacinia*, sed auctor nec thecas nec sporas in conceptaculis globosis vidit, nec descripsit, hinc genus Rozeanum inter formas inferiores *Capnodii* vel *Limacinie* potius adnumerandum est.

1. **Limacinia spinigera** v. Höhnelt, Fragm. z. Mykol. III, in Sitzb. 3505 k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 100. — Mycelio pelliculam tenuem, griseo-atram arcte adpressam formante; hyphis 4-6 μ . cr., brunneis, guttulatis, valde ramosis, rectis, processibus stellatis, triposporioideis, 4-5-cellularibus, usque ad 80 μ . long., interspersis; pycnidiis longe cylindraceis 20 μ . cr., supra medium fusioideis et 35 μ . cr.; sporulis minutis, oblongo-teretibus; peritheciis pro more verticaliter ovoideis, ostiolo 60 μ . lato apertis, setis brunneis 50-60 \approx 6, septatis, rectis brunneis cinctis, 80-140 μ . diam.; ascis crasse clavatis, 40-60 \approx 14-20, octosporis; sporidiis bi-triseriatis, 3-4-cellularibus, hyalinis, elongato-ellipsoideis, 15-20 \approx 5-6, utrinque leviter tenuatis, ad septa non constrictis.

Hab. in foliis vivis Sterculiæ populæ in ins. Samoa (Doct. RECHINGER).

2. **Limacinia Helianthemii** R. Maire, Not. myc., Ann. Myc. vol. IV 3506 (1906) p. 331. — Epiphylla et epiclada, mycelio e floccis aterrimis contexto; hyphis articulatis, subtiliter verruculosis, brunneis; articulis facile secedentibus, sæpe Coniothecii ad instar congrega-

tis; pycnidiis longe conoideis, rectis vel curvulis, 150-300 \times 45-70; pycnosporis ovoideo-oblongis, utrinque rotundatis, levibus, brunneis, transverse 2-3-septatis, longitudinaliter uniseriatis vel rarissime biseriatis plus minusve septatis, 10-13 \times 6-7; peritheciis subglobosis, subastomis vel apice ostiolo epapillato pertusis, nec non setis continuis, brevibus, atro-brunneis sparse vestitis, diam. 90-120 μ .; ascis octosporis, eparaphysatis, oblongis, circ. 28-32 \times 10-16; sporidiis distichis brunneis, levibus, oblongis, utrinque rotundatis, transverse 3-septatis, ad septa haud constrictis, 12-13 \times 5.

Hab. in *Helianthemo lavandulifolio*, *Cocco* quodam infestato, Oran Algeriæ.

3. *Limacinia Guajavæ* (Bern.) Sacc. et Trott., *Capnodium Guajavæ* 3507 Ch. Bernard, Bull. Dép. Agric. Ind. Néerland. XI (1907) p. 21, fig. 37-42. — Mycelio nigro filamentoso, epiphyllō; ceratopycnidiis corniformibus, sursum tenuatis, simplicibus v. trifurcatis, pedicellatis, sporulis minutissimis hyalinis; peritheciis conico-globulosis v. subpiriformibus, 70-120 μ . diam., sursum 3-6 setulis divergentibus, filiformibus brunneis, præditis; ascis ellipsoideis, obtusis, subsessilibus, 30 \times 20, plerumque octosporis; sporidiis parallele stipatis, fusiformibus, hyalinis, 5-locularibus, leviter constrictis, rectis v. curvulis, 16-20 \times 5.

Hab. in foliis *Psidii Guajavæ* in ins. Java. — Ab affini *L. setosa* (Zimm.) Sacc. differt peritheciis non perfecte globosis, sporidiis 5-locularibus non 4-locularibus etc.

LIMACINULA Sacc. — Syll. XVII p. 558 (ut subg.).

1. *Limacinula melioloïdes* (Pat.) Sacc. — Syll. XIV, p. 475 (*Lima-* 3508 *cinia*) — var. *eugenicola* Spegazz, Fungi Paulist., Rev. Mus. La Plata t. XV; p. 16. — Subiculo submembranaceo fusco glabrescente; peritheciis hinc inde glomeratis ovato-ellipsoideis v. obclavatis sessilibus v. breviter pedicellatis obscure ostiolatis; ascis cylindræcis aparaphysatis, 60 \times 14; sporidiis ellipsoideo-subclavulatis triseptatis, 17-20 \times 7-8, sæpe loculo medio supero septo verticali diviso, primo hyalinis dein olivaceis.

Hab. ad folia viva *Eugeniæ* cujusdam, Ipiranga Moça Brasilia (USTERI). — Species, ut videtur, in tropicis late diffusa et pluries descripta; huc forte ducenda *Apiosporium brasiliense* Noack, *Capnodium brasiliense* Puttm., *Limacinia Aurantii* P. Henn. etc.

2. *Limacinula Oleæ* (G. Arnaud) Sacc. et Trott. *Teichospora Oleæ* G. 3509 Arn. Ann. mycol. (1910) p. 472. — Mycelio typice epiphyto, ni-

gro, toruloso; peritheciis sphaeroideis, minutis 100-120 μ . diam., atris; externis erectis, sessilibus vel varie pedicellatis, tandem ostiolo rotundo superne dehiscentibus; ascis cylindraceo-ovoideis, facile diffuis, plus minusve latis longisque, plerumque 50-60 μ . long., 8-sporis, aparaphysatis; sporidiis subdistichis, fuscis, ellipsoideis, transverse 3-septatis, loculis binis septo longitudinali divis, plerumque 15-17 \approx 7-9.

Hab. ad ramos Oleæ europææ a *Lecanio Oleæ* vexatos in Gallia australi. — Cum gen. *Teichospora* typico, ad quod ducit cl. G. ARNAUD nil commune habet et toto habitu et biologia recedit. Forma sporidiorum a *Lim. meridionali* imprimis differt. — Præterea cl. G. Arnaud in Ann. Ecole nat. d'Agricult. de Montpellier. IX (1910) p. 240 c. ic., peculiari mycelio fumagineo nullius momenti habito, non dubitat *Limaciniam Citri* (Br. et Pass.) Sacc. — Syll XIV, p. 474 — ad *Pleosphaerium* ducere et *Pl. Citri* (Br. et Pass.) Arn. vocare, quod mihi omnino absonum et repugnans videtur. Ut ejus synonyma censet *Limaciniam Camelliae* (Catt.) et forte *L. Penzigi* Sacc. et tamquam formas conidiophoras: *Fumago Citri* Pers., *Dematium monophyllum* Risso, *Capnodium Citri* Berk. et Desm., *Morfea Citri* Roze, *M. Hesperidis* Roze, *Apiosporium Citri* Br. et Pass.

3. *Limacinula meridionalis* (G. Arnaud) Sacc. et Trott. *Teichospora* 3510
meridionalis G. Arn., in Ann. mycol. (1910) p. 471. — Mycelio typice epiphyto, nigro, toruloso; peritheciis atris, sphaeroideis, minutis, 100-150 μ . lat., externis erectis, sessilibus v. varie pedicellatis, tandem ostiolo rotundo superne dehiscentibus; ascis tereti-ovoideis, facile diffuis, plus minus latis longisque, plerumque 50-60 μ . long., 8-sporis, aparaphysatis; sporidiis subdistichis, fuscis, clavato-ovoideis, medio constrictis, transverse 3-septatis, loculis binis septo longitudinali divis, plerumque 16-17 \approx 7-8.

Hab. ad ramos Cisti monspeliensis a *Lecanodiaspide sardoæ* vexati, Citri deliciosæ a *Lecanio Oleæ* et *Dactylopio* vexati, Quercus Suberis et Nerii Oleandri a *Lecaniis* vexatorum in Gallia australi. — Cum gen. *Teichospora* typico nil commune habet.

4. *Limacinula indica* (Ch. Bern.) Sacc. et Trott., *Capnodium indicum* 3511
 Ch. Bern. in Bull. Dép. Agric. Ind. Néerland., VI (1907) p. 44, fig. 18-29. — Mycelio brunneo, folia laxè investiente; hyphis copiose ramosis et septatis; ceratopycnidiis longe angustèque ampulliformibus, collo 80-100 μ . longo, parte cylindracea 120-200 μ .

35-45 apice fimbriata; sporulis hyalinis ellipsoideis, continuis 5-6 \times 2-2,5; peritheciis globulosis, 50-200 μ . diam., obtusis, subinde brevi-pauci-setulosis, inter ceratopycnidia nascentibus; ascis ignotis v. jam elapsis; sporidiis ellipsoideis utrinque rotundatis, 3-septatis, 28-33 \times 15-20, loculis binis centralibus septo uno alterove longitr. divisus, guttulatis, dilute coloratis.

Hab. in pag. super. foliorum *Kickxiae elasticæ* in ins. Java, socia *Lecanii* sp.

5. *Limacinula tenuis* (Earle) Sacc. et Trott., *Antennularia ? tenuis* 3512
Earle, Bull. N. York Bot. Gard. III (1905) p. 302. — Epiphylla; mycelio late effuso, pelliculas tenues olivaceo-brunneas formante; hyphis mycelii valde intertextis, delicatis, tenue tunicatis, subhyalinis, circ. 4 μ . diam., crebro septatis, articulis 12-18 μ . longis, mycelio hinc inde catenulas toruloideas ex cellulis 8-10 \times 5-6 constante formante; peritheciis copiosis, sparsis mycelio insertis, nigris, globosis, astomis, 200 μ . diam.; ascis ellipsoideis, tenuiter tunicatis, 80 \times 25, copiose filiformi-paraphysatis; sporidiis inordinatis ellipsoideis, obtusis, hyalinis, 4-8-septatis, 30 \times 12, septo verticali divisus.

Hab. in foliis *Musæ* sp., rarius *Ingæ veræ*, Porto Rico (HELLER). — Conidia triposporoidea adsunt.

6. *Limacinula samoënsis* v. Höhnelt, Fragm. z. Mykol. III in Sitzb. 3513
k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 101. — Mycelio pannoso, late effuso, facile secedente, brunneo-nigricante; hyphis basalibus dense ramosis, 3,5-5 μ . cr., levibus; hyphis primariis rigidulis, granulosis, parce ramosis, 7-9 μ . cr., in articulos 12-19 μ . longos septatis; hyphis antennarioideis torulosis, ex articulis doliiformibus, 16 \times 8 formatis; peritheciis rotundatis 260 μ . diam., in hyphis antennarioideis sessilibus, nigris, supra umbilicatis, glabris; ascis copiosis, crasse clavatis 110 \times 24, subapophysatis, octosporis; sporidiis distichis, versiformibus oblongis 5-6-septato-muriformibus, hyalinis, serius diaphane brunneolis, 28-36 \times 9-14.

Hab. in foliis coriaceis in ins. Samoa (Doct. RECHINGER) et in foliis *Fici elasticæ* in Java (v. HÖHNEL). — Conidia triposporoidea quoque adsunt: radiis 3-6-cellularibus, 35-50 \times 6. Cfr. etiam v. Höhn. Fragm. z. Mykol. VIII, p. 37.

7. *Limacinula roseospora* v. Höhn. Fragm. z. Mykol. XII (1909) 3514
pag. 37. — Conceptaculis hypophyllis, gregariis v. sparsis, facile secedentibus, siccis disciformibus, umbilicatis, 200-300 \times 120-160,

subcarnosis, brunneo-atris, pluristratoso-cellulosis, basi in halonem circularem dilatatis; peritheciis inclusis, depresso-globosis, carnosulis, 120-140, μ . alt., 160-180 μ . cr., ostiolo minuto, impresso; ascis aparaphysatis late clavatis, sessilibus, 85-100 \times 20-28, tenuissime tunicatis, octosporis; sporidiis parallele polystichis, curvulis, cylindraceo-fusoideis, roseis, utrinque obtusulis, 13-15-septatis, ad septa vix constrictis loculo uno alterove longitrorsum diviso, 56-80 \times 7-8.

Hab. in foliis coriaceis vivis arboris cujusdam, Sao Leopoldo Brasilie (P. THEISSEN in herb. REHM). — Mycelio capnodiaceo deficiente a typo Limacinie et Limacinulæ abhorret.

PARACAPNODIUM Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 325 (Etym. *para* prope, h. e. *Capnodio* affine). — Subiculum effusum, submembranaceum ubique denseque hirtum; aculeolis erectis subconoideis simplicibus v. ramulosis sursum attenuatis abrupteque in perithecia subglobosa desinentibus; Asci numerosi, ovati, octospori, aparaphysati; sporidia subfusoidea 3-septata hyalina. — Gen. a *Capnodaria*, *Limacinia*, *Scoria* eximie distinctum quia sit statu conidico, conidiis hyalinis stellatis (*Trinacrium*) ornato, concomitatum.

1. **Paracapnodium pulchellum** Speg., l. c. p. 325, fig. 7. — Late ef- 3515
fusum, sæpius epiphyllum, aterrimum, glomerulosum, ex hyphis tortuoso-intestininiformibus coalescentibus crebre septulatis, articulis 2-4 μ . cr., sæpius biguttulatis, obscure olivaceis efformatum; stipitibus crebris breviter ramosis 250-1000 μ . long., deorsum crassiusculis atque laxè potentiusque setulosis, apice perithecio subgloboso minuto vix papillulato, 60-80 \times 50-60 ornatiss; ascis dense constipatis octosporis, antice subtruncatis crasseque tunicatis postice brevissime noduloseque pedicellatis 24-30 \times 10-14; sporidiis e fusoideo lenissime subclavulatis utrinque obtusiusculis, 12-14 \times 4-5 ad septum medium constrictulis, loculo tertio supero sæpius crassiore, loculis plerumque grosse uniguttulatis, semper hyalinis.

Hab. ad folia viva Ilicis paraguariensis in silvis prope San Pedro Misiones, Argentina Amer. austr. — In pilis stipitum adsunt conidia (*Trinacrium pulchellum* Speg.) radiatim 3-4-ramosa, ramulis hyalinis 1-3-septatis, 10-15 \times 2.

NÆTROCYMBE Körb. Lich. sel. Germ. n. 58 (1858) (Etym. *nætron* fusus et *cymbe* navicula, ob sporidia initio fusoidea), *Coccodinium*

Massal. Esam. comp. p. 55 (1860). — Subiculum spongioso-crustaceum ex hyphis moniliformibus, atris conflatum. Perithecia globosa, papillata, molliuscula, minute pertusa, dein discoideo-collabentia, subiculo inserta v. cincta. Asci octospori, breves, mucoso-paraphysati. Sporidia fusoides-oblonga, pluriseptato-muriformia, brunnea.

- 1 *Nærocymbe fuliginea* Körb. Par. Lich. pag. 442, Rehm, Discom. 3516 pag. 501, *Coccodinium Bartschii* Mass. — Subiculo 2-4 mm. cr., spongioso-crustaceo, brunneo-nigricante, late effuso ex hyphis ramosis, constricto-septatis, 6 μ . cr., formato; peritheciis sparsis v. confertis sessilibus v. infossis, globosis, clausis, 200-300 μ . diam., in osculum minutum rotundum leviter productis, siccis collabentibus, brunneis; ascis clavato-ovoideis, apice rotundatis, 75-80 \approx 30, octosporis, paraphysibus tenuissimis ramotis mucosum jodi ope cærulescente obvolutis; sporidiis oblongis, fusoides v. clavatis initio 2-4- dein 8-cellularibus, septisque uno alterove longitudinali partitis, brunneis 22-36 \approx 9-12, polystichis, articulis 1-guttulatis.

Hab. in rami Alni et Tiliæ in Germania et Austria.

Fam. 2. Sphæriaceæ Fr.

Sect. 1. Allantosporæ.

ENCHNOA Fr. — Syll. I p. 89, IX p. 442, XI p. 271, XIV p. 478, XVI p. 1128, XVII p. 560.

1. *Enchnoa Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 3517 (1906) p. 197 cum icon. — Peritheciis atris hinc inde dense gregariis subcarbonaceis, lenticulari-hemisphæricis, subiculo atro absconditis, serius denudatis ac grosse ostiolato-perforatis, 150-180 μ . diam.; ascis clavatis, longiuscule pedicellatis, paraphysatis, octosporis 100-110 \approx 10, p. sp. 50-60 μ . long.; sporidiis cylindræis subrectis, hyalinis, utrinque acutiuscule obtusatis, 16-18 \approx 4-5,5, minute 2-guttulatis.

Hab. ad ramos decorticatos putres mucidos secus rivulum Matto Queimado, Misiones Argentina. — Subiculi hyphæ subflexuosæ, septulatæ 50-150 \approx 5.

2. *Enchnoa alnicola* v. Höhn., Fragm. z. Myk. II, in Sitzb. k. Ak. 3518 d. Wiss. Wien CXV, Abt. I (1906) p. 7. — Peritheciis densi-

scule sparsis, 1 mm. lat., discoideo-depressis, mollibus, semper tectis et tantum papilla minuta ostiolarum erumpentibus, brunneo-lanatis, hyphis violaceo-brunneis, 4-5 μ . cr.; ascis copiosissimis, teneris, stipitatis, clavatis, octosporis, 60-80 \approx 6-8; paraphysibus copiosis ascos multo superantibus, filiformibus, 3-5 μ . cr.; sporidiis 2-5-seriato-conglobatis, flavidis, coacervatis brunneolis, allantoideis, curvulis, plasmate sæpe bipartito, 8-12 \approx 1,5-2,5.

Hab. in ramulis Alni (glutinosæ?) secus Danubium pr. Tulln Austriæ. — *Enchnocæ lanatæ* affinis.

NITSCHKEA Otth — Syll. XI p. 172, XVI p. 417, XVII p. 561.

1. **Nitschkea crustacea** (Karst.) Sacc. et Trost., *Cœlosphæria crustacea* 3519 Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII, 4 (1906) p. 7. — Peritheciis confertissimis, exquisite cupuliformibus, atris, nudis, minutissimis; ascis tereti-clavatis, octosporis; sporidiis subdistichis, elongatis, curvulis v. rectis, hyalinis, 8-12 \approx 2.

Hab. in ramulis arborum decorticatis prope Palovina in Sibiria (O. LÖNNBOHM).

2. **Nitschkea moravica** Niessl in J. Paul, Verh. naturf. Ver. in Brünn 3520 XLVII p. 21 (extr.). — Peritheciis aggregatis, sæpe dense cæspitosis, 0,2 mm. circ. diam., subovoideis, centro collabescendo cupuliformibus, subatris, basi fibrosis; ascis clavatis, longe stipitatis 50-70 (parte spor. 40 μ .) \approx 12, octosporis; sporidiis 1-3-stichis, cylindræis, curvatis, hyalinis, utrinque obtusis uniguttulatis, 10-11 \approx 2-3.

Hab. in ramis emortuis Æsculi Hippocastani pr. Schöneberg Baviaræ. — A. Nits. *Fucklii* (= *Cœlosp. cupularis* [Pers.] Karst.) differt peritheciis basi fibroso-floccosis et ascis clavatis.

ACANTHONITSCHKEA Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 116 (Etym. *acantha*, spina et *Nitschkea*). — Perithecia superficialia, e coriaceo submembranacea, in sicco collabescentia, asci paraphysati, octospori. Sporidia allantoidea, curva, continua, hyalina. — Est quasi *Nitschkea* setigera.

1. **Acanthonitschkea argentinensis** Speg., l. c. p. 117, cum icon. — 3521 Peritheciis hinc inde cæspitosis v. sparsis, cortice insidentibus, e nigro glaucescentibus, 200-250 μ . diam., minute papillatis, in sicco cupulato-collabentibus, basi hyphis paucis radiantibus septulatis, olivaceis, 100 \approx 6-7 cinctis, setulisque erectis, rigidulis, acutis, opacis, 50-200 \approx 10 conspersis; contextu indistincto opaco, nigro; ascis

clavatis breviter tenuato-pedicellatis, p. sp. $20 \approx 10$; sporidiis cylindraceo-allantoideis, utrinque obtusis, $6-8 \approx 2$, valde incurvatis, utrinque minute guttulatis, hyalinis.

Hab. ad ramos emortuos subputrescentes Ilicis paraguariensis in Campos das Guías Argentinae.

FRACCHIÆA Sacc. — Syll. I p. 93, IX p. 445, XI p. 272, XVI p. 418.

1. **Fracchiæa Romelliana** Berl. Ic. fung. III, p. 26, t. XXXII, f. 3. 3522

— Peritheciis lignicolis, denudatis (an primum cortice tectis?) superficialibus, nigris, in greges parvos collectis, rugulosis, complanatis v. collapsis, centro minute pertusis, $\frac{1}{4}$ – $\frac{1}{3}$ mm. diam.; ascis clavatis sessilibus, $80-90 \approx 15-18$, polyporis; sporidiis valde confertis, allantoideis, innumeris, $7-8 \approx 2$, hyalinis, in asco pallidissime lutescentibus, utrinque minutissime 1-guttatis.

Hab. in cortice Rosæ, Upsaliæ Sueciæ (ROMELL in herb. Sacc.).

2. **Fracchiæa cucurbitarioides** Speg. — Syll. I, p. 94. — f. *eucalyptina* (Berl.) Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 333 (sub f. *Eucalypti*). — f. *Pini-insignis* Speg., l. c. p. 333: 3523

peritheciis ligno denudato hinc inde gregariis v. sparsis, globoso-depressis, vix papillulatis subcarbonaceis; ascis breviter crasseque attenuatis, $120 \approx 20$, aparaphysatis, pleiosporis; sporidiis cylindraceis vix curvulis utrinque rotundatis, $9-10 \approx 1,5$, minute 1-guttulatis hyalinis. — f. *Quercus-sessilifloræ* Speg., l. c. pag. 334. — Peritheciis dense coacervatis acervulos atros compactos per rimas corticis durioris erumpentes efficientibus; ascis eximie clavulatis $100 \approx 18-20$ aparaphysatis pleiosporis; sporidiis cylindraceis leniter curvulis $10-12 \approx 1,5$ utrinque obtusis, eguttulatis hyalinis.

Hab. f. 1. prope S. Catalina, f. 2. Tucuman, f. 3. La Plata, in Rep. Argentina Amer. austr.

3. **Fracchiæa affinis** Syd. in De Wildem., Flore Bas-Moy. Congo, 3524

t. III, fasc. I (1909) Extr. p. 16. — Peritheciis superficialibus, solitariis vel paucis aggregatis, globosis, $200-350 \mu$. diam., mox, præcipue in sicco, profunde depresso-cupulatis, atris, non v. vix papillatis, dense minuteque rugulosis, coriaceis v. vix coriaceo-carbonaceis, basi pilis fuscis septatis $5-7 \mu$. cr. notatis; ascis aparaphysatis, clavatis, longissime stipitatis, p. sp. $20.32 \approx 9-11$, pedicello usque ad 50μ . longo, myriosporis; sporidiis cylindraceis plerumque rectis, hyalinis, continuis, biguttulatis, $5-8 \approx 1,5-2$.

Hab. ad cortices Kisanu, Congo (VANDERYST). — A *Fr. multiasca* Pat. differt sporidiis cylindræis, angustioribus.

4. *Fracchiæa Coniferarum* v. Höhn. Fragm. Mykol. VII (1909) p. 31. 3525
— Peritheciis erumpentibus et peridermio laciniis cinctis, subsparsis, e globoso collabescendo subpatellatis, opace nigris, asperulis, firmis, coriaceis, 350-500 μ . diam., ostiolo obsoleto; cellulis contextus 10-12 μ . diam.; ascis polysporis teneris, apice rotundatis, breviter sensim stipitatis, 100-110 \times 10-16; pseudoparaphysibus, articulatis ascos superantibus obvallatis; sporidiis irregulariter conglobatis allantoideis, curvulis v. rectis, utrinque 1-guttulatis 6-8 \times 1,5, hyalinis.

Hab. in cortice Pinorum pr. Waidhofen Austriæ inf. (P. STRASSER). — Hyphæ ad peritheci basim ramosæ, septatæ, atrobrunneæ, 6-6 μ . cr. — Peraffinis *Fracchiæa subcongregatæ* (B. et C.) Ell. et Ev. — Syll. XVI, p. 419.

NEOZIMMERMANNIA Koord., Botan. Untersuch. (1907) p. 68 (Etym. a Doct. ALB. ZIMMERMANN phytopathologo). — Perithecia stromate destituta, sparsa v. 2-15 inter se alte adnata, in cortice v. in foliorum epidermide immersa, globosa v. globoso-ovoidea vel angulata, ostiolo distincto conoideo breviusculo v. interdum sat longo pertusa, nigra, minuta, glabra, epidermide secedente quandoque sublibera. Asci octospori, aparaphysati, breviter stipitati, cylindracei v. cylindraceo-clavati, tunica apice incrassati et haud raro *Gnomonia* modo perforati. Sporidia eximie allantoidea, majuscula, continua, hyalina v. subhyalina, utrinque rotundata. — Genus *Massalongiellæ* proximum.

1. *Neozimmermannia Elasticæ* (Zimm.) Koord. in l. c. pag. 1-121, 3526 tab. I-X et p. 188, *Phomatospora Elasticæ* Zimm. — Syll. XVII. p. 578. — Peritheciis globosis 60-170 v. plerumque 100 μ . diam., ostiolo 80-270 plerumque 80-110 μ . longo; pilis deciduis subhyalinis simplicibus 60-100 μ . longis laxè pilosis; ascis 42-65 \times 7-8; sporidiis 14-19 (plerumque 16-17) \times 3,5-5, densè minutissimeque granuloso-guttulatis.

Hab. in foliis et ramulis emortuis Fici Benjaminæ, F. elasticæ, Hevæ brasiliensis, Asia, Africa et Europa (ubi introducta). — Huc pertinent status conidici qui plantam valde vexant: *Glaeosporium Elasticæ* Cooke et Massee, *Colletotrichum Ficus* Koord.

Sect. 2. Hyalosporæ.

PHTHORA D'Hérelle, Bull. Soc. Myc. Fr. XXV (1909) p. 184 cum tab. IX (Etym. a *pthairo* destruo). — Stroma pelliculosum, minimum, nigrum, subcorticale, hinc inde carbonaceo-compactum, corticem elevans, cellulosum, nigrum, applanatum, forma irregulari. Perithecia superficialia, poro dehiscentia, gregaria, subseriata, membranacea, glabra, sessilia, nigra; frequenter duo aut plura seriatim cohærentia, membrana separationis subinde evanescente et tunc perithecia tubum (?) maxime protensum efformant. Asci sphærici, brunnei, sessiles, aparaphysati; sporidiis simplicibus, sphæricis, hyalinis.

1. *Phthora vastatrix* D'Hérelle l. c. Characteres generis. Perithecia 3527 bene evoluta $50 \approx 38$, nucleo viscoso. Asci 5-8 μ . diam. octospori. Sporidia minutissima, sphærica, 1-2 μ . diam. hyalina. Hyphæ mycelii ramosæ, septatæ, 2-8 μ . cr. demum nigricantes.

Hab. in libro Coffeæ arabicæ, cui valde noxia, in Guatemala. E diagnosi et figuris l. c. species parum clara et quoad finitates perdubia.

ASCOSPORA Fr. Summa Veg. Scand. p. 425 (1849), Wint. Krypt. Flora, Pilze II, p. 340 (1887) (Etym. *ascus* et *spora*). — Perithecia initio subcuticularia, minuta, poro pertusa, membranacea subglobosa, ut plurimum mycelio ramoso, adpresso, brunneo insidentia v. cincta. Asci perexigui, aparaphysati; sporidia ovato-oblonga, hyalina, continua, rarissime basi pseudoseptata. — A *Guignardia* præsertim mycelio sæpe asteromatoideo et minutie dignoscitur. — Ad hoc genus pertinent: *Ascospora Silenes* (Niessl) Wint. (*Asterina Silenes* [Niessl] Sacc. Syll. I, p. 47); *A. melæna* (Fr.) Wint. (*Asterina melæna* (Fr.) Sacc. Syll. I, p. 48); *A. Himantia* (Pers.) Wint. (*Asterina Himantia* (Pers.) Sacc. Syll. I, p. 761); *A. microscopica* Niessl (*Asterina microscopica* (Niessl) Sacc. Syll. I, p. 45).

1. *Ascospora graminis* Lind, Fungi (Micromyc.) from North-East 3528 Greenland (1910) pag. 152, tab. X, fig. 1-2. — Mycelio repente, effuso, subpersistente, hypophyllo, fusco e hyphis torulosis, ramosis, septatis composito; peritheciis superficialibus, applanato-convexis, sparsis 80-100 μ . diam., medio perforatis; ascis fasciculatis, globoso-ovatis, sessilibus, apice crasse tunicatis, aparaphysatis, octo-

sporis, 24-40 \times 13-17; sporidiis ellipsoideis, inæquilateralibus, granulosis, hyalinis, conglobatis, 15-16 \times 4.

Hab. in foliis emortuis Poæ glaucæ et P. abbreviatæ, Lille Snænes, Grœlandia.

2. *Ascospora Ophiorrhizæ* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3529 p. 389. — Maculis epiphyllis, subrotundis, flavo-virentibus, 2-5 mm. lat.; peritheciis minutissimis, nigris, copiosis, subsparsis, innatis, globoso-depressis, 100-125 μ . lat., 100 μ . alt., sub stromatibus evolutis, non prominulis, tenuiter membranaceis brunneis, circa ostiolum nigris ex mycelii hyphis endogenis ob haustoria punctatis oriundis; ascis fasciculatis, octosporis, apice rotundatis, 50-60 \times 14, paraphysatis; sporidiis ovato-oblongis, distichis, hyalinis, continuis, levibus, 10-11 \times 4-5.

Hab. in foliis Ophiorrhizæ spec. in M. Gedeh Javæ.

GUIGNARDIA Viala et Rav. — *Læstadia* Auersw. — Syll. I p. 420, IX p. 577, XI p. 289, XIV p. 516, XVI p. 455 (*).

1. *Guignardia Lini* (Rostr.) Sacc. et Trott., *Læstadia Lini* Rostr., Bot. Tidsskr. XXVIII (1907) pag. 217. — Peritheciis lenticularibus, epidermide tectis, dense sparsis, copiosis; ascis clavato-oblongis, sessilibus 4-8-sporis, 40 \times 9; sporidiis monostichis, oblongo-fusoides, 12-13 \times 3.

Hab. in caulibus emortuis Lini perennis ad Olgin Lug in montibus Alai, alt. 3000 m. Asia occ. (O. PAULSEN).

2. *Guignardia Pegani* (Rostr.) Sacc. et Trott., *Læstadia Pegani* Rostr., Bot. Tidsskr. XXVIII (1907) p. 217. — Peritheciis nigris, dense gregariis, lentiformibus, depressis, 80-90 μ . latis; ascis ovato-oblongis, curvatis, sessilibus, paraphysatis, 8-sporis, 60 \times 24, membrana superne usque ad 10 μ . crassa; sporidiis inordinatis, oblongis, 12-13 \times 6.

Hab. in caulibus emortuis Pegani Harmalæ in Transcapia (O. PAULSEN).

3. *Guignardia Vaccinii* Shear, Bull. Torr. Bot. Club XXXIV (1907) 3532 p. 316. — Pycnidii (*Phoma Shearii* Sacc. et Trott.) plerumque hypophyllis, densiuscule gregariis, 100-120 μ . diam., globosis vel depresso globosis, subcutaneo-erumpentibus, ostiolo brevissimo;

(*) De nominibus *Læstadia* et *Guignardia* cfr. TRAVERSO, Fl. ital. cryptog. Pyren. p. 375.

sporulis e hyalino melleis, levibus, $10,5-13,5 \times 5-6$, obovatis, apice subtruncatis, mucro granulato, fere inconspicuo, curvato partim obductis; sporophoris $10-15 \mu$. longis; peritheciis pycnidia omnino imitantibus; ascis octosporis tereti-clavatis pro more breviter stipitatis, aparaphysatis, $60-80 \times 9-12$; sporidiis levibus, hyalinis, ellipsoideis, v. subrhombeis et leniter inæquilateris, $13,5-16,5 \times 6,5-7$.

Hab. in foliis *Vaccinii macrocarpi*, New Jersey, Virginia, Massachusetts, Nova Scotia, Wisconsin Amer. bor.

4. *Guignardia humulina* Bubák, Ann. Mycol. IV (1906) pag. 110. — 3533
Peritheciis subepidermicis, cauliculis, sparsis v. aggregatis, globoso-depressis, $80-200 \times 50-100$, nigris, excipulo $8-20 \mu$. cr., atrobrunneo; grosse celluloso; ascis tereti-oblongis, rectis v. curvulis, 75×15 , breve stipitatis, apice vix tenuatis rotundatisque aparaphysatis; sporidiis ellipsoideo-oblongis, utrinque subconoideis, $13-20 \times 4,5-7,5$, hyalinis.

Hab. in caulibus emortuis Humuli Lupuli prope Tábor Bohemiæ.

5. *Guignardia Phytolacæ* Almeida et Da Camara, Bol. Soc. Brot. 3534 XXIV (1909) p. 11. — Peritheciis sparsis, plerumque gregariis, innatis, demum erumpentibus globoso-depressis, contextu pseudoparenchymatico roseo, poro pertusis, $130-150 \mu$. diam.; ascis subfusiformibus, rectis v. leniter curvulis, sessilibus, octosporis, $60-70 \times 12-15$; sporidiis distichis ellipsoideis, rectis, clavatisve et tunc deorsum tenuatis curvatisque, utrinque rotundatis, continuis, minute pluriguttulatis, $17-20 \times 7,5-8$, hyalinis.

Hab. in caulibus *Phytolacæ decandræ*, Choupal prope Coimbra (A. MOLLER). — Ubi contextus sit vere *roseus*, an species *Hypocreaceis* referenda?

6. *Guignardia rhytismophila* Rehm, Ascom. n. 1650 (1906), Ann. Mycol. III (1906) p. 70. — Peritheciis gregariis, epiphyllis, globulosis, nigris, ostiolo minutissimo prominentibus, demum patellari-collabentibus, $120-130 \mu$. diam.; contextu parenchymatico fusco; ascis fusoides, tenuibus $55-60 \times 12$, octosporis, aparaphysatis; sporidiis distichis, oblongo-ovoideis, utrinque rotundatis, continuis, utrinque 1-guttulatis, hyalinis, $12-14 \times 5-6$.

Hab. in foliis adhuc vivis *Aceris Pseudoplatani* a *Rhytisma acerino* infectis pr. Königstein Saxonie (W. KRIEGER). — Perithecia plerumque in zonis albidis circa *Rhytisma* inserta.

7. *Guignardia Molleriana* Da Camara, Bol. Soc. Broteriana, XXV 3536 (1910) Extr. p. 6. — Peritheciis plerumque epiphyllis, in macula

indeterminata cinerescenti insidentibus, erumpentibus, sparsis, subglobosis, atris, poro pertusis, 150-180 μ . diam.; ascis tereti-clavulatis, sessilibus, aparaphysatis, 8-sporis, 60-80 \times 12-15; sporidiis distichis, ovato-oblongis v. ovoideo-fusoideis, hyalinis, continuis, utrinque rotundatis, 18-25 \times 6-9.

Hab. in foliis Magnoliæ sp., in horto botanico Coimbra Lusitanicæ (A. MOLLER).

8. *Guignardia Lingue* (Speg.) Sacc. et Trott., *Læstadia Lingue* Speg., 3537
Fungi Chilenses (1910) p. 31, cum icon. — Maculis nullis; peritheciis sæpius epiphyllis parenchymate innatis, epidermide vix nigricata tectis, lenticularibus, minute ostiolatis, 100-150 μ . diam.; ascis cylindraceis breviter pedicellatis aparaphysatis, octosporis 80-90 \times 4-6; sporidiis fusoides-ellipsoideis, 12-13 \times 3-3,5, sæpe guttulis, hyalinis.

Hab. in foliis siccis dejectis Perseæ Lingue prope Ciudad de Valdivia et Cerro Carracol de Concepcion Chile Amer. austr.

9. *Guignardia javanica* Koord., Botan. Untersuch. (1907) pag. 188, 3538
fig. 16, III. — Maculis maximis, indeterminatis, nigrescentibus, peritheciis innatis, laxe gregariis, amphigenis, sed sæpius epiphyllis, atris, glabris, 100-200 μ . diam., ovoideis, ostiolo brevi, crassiusculo, epidermidem perforante; ascis paraphysatis, cylindraceis, apice haud incrassatis, 8-sporis, 80-90 \times 25-30; sporidiis oblongis, hyalinis, continuis, subdistichis, utrinque rotundatis, 17-18 \times 8,5-10.

Hab. in foliis vivis Cordiæ suaveolentis prope Purwerdjo, insula Java (KOORDERS).

10. *Guignardia Photiniæ* Almeida et Da Camara, Bol. Soc. Brot. XXIV 3539
(1909) p. 11, *Læstadia Photiniæ* Alm. et Cam. Revista Agron. (1906) p. 384. — Peritheciis epiphyllis, raro amphigenis, sparsis gregariisve, primo tectis, demum erumpentibus, subglobosis, poro pertusis, 150-200 μ . diam.; ascis irregularibus, sursum deorsumque tenuatis, breviter stipitatis, octosporis, 60-70 \times 14-16; sporidiis distichis amygdaliformibus, oblongo-ovatis, subinæquilateralibus, utrinque rotundatis, granuloso-farctis, rectis v. tenuiter curvulis, 16-18 \times 7-8.

Hab. in foliis Photiniæ sp. in Horto botanico, Coimbra Lusitanicæ (A. MOLLER).

11. *Guignardia diffusa* (Crié) Sacc. et Trott., *Læstadia diffusa* (Crié) 3540
Sacc. et Trav. — Syll. XIX, p. 1044 — *Depazea diffusa* Crié in Ann. Sc. nat. Bot. VII (1878) pag. 38, t. II, f. 4, 10, 11, t. VI, f. 10, tab. VIII, f. 15, 27. — Peritheciis amphigenis, prominulis,

atris; ascis lunge clavatis, breviter tenuato-stipitatis; sporidiis oblique monostichis, oblongo-ellipsoideis, continuis, hyalinis.

Hab. in foliis *Quercus* et *Castaneæ* in Gallia. — Teste auctore adsunt *Phyllostictæ* et *Septoriæ* species ut pycnidia habendæ; et quoque huc spectarent *Hendersoniæ*, *Pestalozziæ* et *Entomosporii* species, quod a priori excludendum.

12. *Guignardia microsticta* Sacc., sp. n. — Peritheciis hypophyllis 3541

dense gregariis, epidermide minutissime bullata et tunc punctatodealbata tectis et vix denique erumpentibus, subglobosis, obsolete ostiolatis 150-200 μ . diam. nigricantibus, contextu parum distincte pseudoparenchymatico, atro-rufis; ascis fusoides apice obtusulis, 70 \times 10-11 in stipitem facile dilabentem sensim tenuatis, parte sporifera 50-55 μ . longa; sporidiis octonis, oblongis, utrinque obtusulis, curvulis, 16 \times 5,5, hyalinis, intus minute granuloso-farctis, strato mucoso hyalino sat persistente obductis; paraphysibus nullis.

Hab. in pagina inferiore *Cattleyæ* sp., cultæ in calidariis, Versailles pr. Parisios Galliae (P. HARIOT). — Ob bullulas punctiformes albo-flavidas epidermicas perithecia tegentes species mox dignoscitur et habitum peculiarem induit. A *Guign.* (*Læstidia*) *Traversi* Cav. differt præter hanc notam, ostiolo non prominulo, sporidiis distichis et muco cinetis.

13. *Guignardia ? melanostigma* (Lév.) Sacc. et Trott., *Sphæria melano-* 3542

stigma Lév., Voyage dans la Russie mérid. II, p. 105, t. V, f. 6 (1842). — Epiphylla, sparsa; peritheciis in areis decoloratis subcentralibus, nigris, globulosis, nitidulis, prominulis, atro-farctis, ostiolo obsolete; ascis brevibus, apice valde dilatatis 4-5-sporis; sporidiis globulosis (?) diaphanis.

Hab. in foliis Graminaceæ cujusdam prope Sou-Dagh Rossiae merid. — Affinis dicitur *Sphærellæ recutitæ*, sed peritheciis maculicolis et non seriatis et sporidiis diversa.

14. *Guignardia Musæ* Raciborski, Bull. Accad. Sc. Cracoviae (1909) p. 388. 3543

— Peritheciis epiphyllis dense stipatis, in maculis irregulariter et non distincte limitatis, rubellis dein brunneis arescentibusque; peritheciis subcutaneis, ostiolo minutissimo non emergente præditis, vix prominulis, excipulo superne nigro, inferne incolore donatis, globosis 70-100 μ . diam.; ascis aparaphysatis, paucis, fasciculatis, clavato-ovoideis, crasse tunicatis, 50-56 \times 20, octosporis; sporidiis ovato-oblongis, hyalinis, levibus, utrinque rotundatis leviter inæquilateris, 18-19 \times 8-9, intra ascum 1-cellularibus, extra (germinando?) inæqualiter bicellularibus.

Hab. in foliis vivis Musæ paradisiacæ, Buitenzorg insulæ Javæ.

15. *Guignardia Ulvæ* M. Reed, Univers. of California Publ. v. I 3544 (1902) p. 160, tab. V, fig. 1-6. — Peritheciis numerosis irregulariter sparsis, sphæroideis, obtusiusculis, 364-509 μ . cr., ostiolatis in thallo matricis immersis, utriusque prominulis, ex brunneo nigris; ascis late clavatis, in pedicellum basi attenuatis, 53-57 \times 9, octosporis; sporidiis oblongis v. ovatis, plasmate granuloso-farctis, hyalinis, 10-13 \times 3,5-7.

Hab. in thallo plus minusve deformato *Ulvæ californicæ* in litore S. Francisco Californiæ.

16. *Guignardia alaskana* M. Reed, Univers. of California Publ. v. I 3545 (1902) p. 161, tab. XV, fig. 7 et tab. XVI. — *Læstadia alaskana* (Reed) Sacc. et D. Sacc., Syll. XVII, p. 576. — Peritheciis brunneis v. nigris, numerosis, irregulariter distributis, sphæroideis, in thallo matricis immersis 273-450 μ . cr., ostiolatis; ascis clavatis basi in pedicellum attenuatis, 25-33 \times 7-14, octosporis; sporidiis anguste ellipsoideis, utrinque acuminatis, membrana tenui, hyalina, 8,5-13,5 \times 3-4.

Hab. in thallo plus minusve deformato *Prasiolæ borealis* in litore Alaskæ. — Rursus referimus diagnosin ex ipso Auctore; diagnosin enim in Syll. (l. c.) allatam, ex icone (tab. VII) satis dissona in Harriman, Alask. Exped. eruimus.

17. *Guignardia Coccocarpicæ* (Pat.) Sacc. et Trott., *Læstadia Cocco-* 3546 *carpicæ* Patouill., Bull. Soc. Myc. Fr. XXIV (1908) p. 10. — Peritheciis erumpentibus dein superficialibus, sparsis, atris, nonnullis hyphis brunneis, septatis, 5 μ . cr., brevibus adfixis, globosis, levibus, apice papillatis, 300-400 μ . diam., contextu coriaceo, brunneo, celluloso, nucleum album includentibus; paraphysibus filiformibus, hyalinis, rarissimis; ascis clavatis, 7-sporis, 75 \times 10-15; sporidiis hyalinis, simplicibus, ovoideis, sæpe biguttulatis, uniseriatis, 10-12 \times 8-10, ope jodi nulla.

Hab. in thallo *Coccocarpicæ Gayanæ* ex Chile (Gay).

18. *Guignardia Bambusæ* Miyake et Hara, Bot. Mag. Tokyo (1910) 3547 p. (238) [japonice].

Hab. in foliis *Bambusæ* sp. in Japonia.

19. *Guignardia juniperina* (Ellis) Rota-Rossi, Atti Ist. bot. R. Univ. 3548 Pavia ser. II, t. XIII, p. 206. — Ita vocanda *Læstadia juniperina* (Ellis) Sacc. Syll. IX p. 586.

20. *Guignardia Theæ* (Racib.) Bernard, Bull. Dept. Agric. Indes 3549

Neerland VI (1907) p. 26. — Ita vocanda est *Laestadia Theæ* Racib. — Syll. XVI, p. 456.

21. *Guignardia Betulæ* (Auersw.) Sacc. et Trott., *Sphaerella Betulæ* 3550
Auersw. in Gonn. et Awd. Mycol. europ. Heft V e VI, t. III,
f. 36 (absque diagnosi).

Hab. in foliis *Betulæ* in Germania. — Ex icone: perithecia hinc inde conferta, hypophylla; asci tereti-obclavati, octospori; sporidia disticha v. oblique monosticha, obovato-oblonga, continua, hyalina.

GLOMERELLA Schenk et Spauld. — Syll. fung. vol. XVII p. 573.

— Perithecia non vere rostrata sed sursum sensin tenuato-piriformia, nec desunt species omnino erostres, hinc genus *Sphaeriaceis* potius quam *Ceratostomataceis* adscribendum. A *Physalospora* et *Guignardia* pseudostromate subpannoso videtur distinguendum. Paraphyses probabiliter in pluribus speciebus, saltem initio, adsunt.

1. *Glomerella Gossypii* Edgerton, Mycologia, I (1909) p. 119, fig. 1 3551
et tab. VIII. — Peritheciis discretis v. aggregatis, copiosissimis, innatis, ostiolo erumpentibus, rarius subsuperficialibus, brunneo-nigricantibus, subglobosis v. piriformibus, 100-160 \approx 80-120, plerumque 140 \approx 115; ostiolo nunc brevi, interdum tereti-conoideo 60 μ . longo; ascis numerosis, clavatis, 55-70 \approx 10-14; sporidiis uniseriatis v. irregulariter biseriatis, subellipsoideis, raro curvulis, granulosi, 1-nucleatis, hyalini, 12-20 \approx 5-8, plerumque 13-14 \approx 7; paraphysibus tenuibus, copiosis, perithecii cavitatem supra ascos implentibus.

Hab. in caulibus *Gossypii* herbacei, Baton Rouge, La, Amer. bor. Status conidiophorus est *Colletotrichum Gossypii*. — Species *Gossypio* vere noxia.

2. *Glomerella fusarioides* Edgert., Botan. Gazette XLV (1908) p. 404 3552
Nota. — Peritheciis subliberis, subsparis sed copiosis, brunneo-nigricantibus, subglobosis v. piriformibus, interdum sensim subrostratis, 150-200 \approx 140-175; ascis numerosis, clavatis, 50-75 \approx 9-10; sporidiis irregulariter biseriatis, rectis v. curvulis, 12-18 \approx 3-4.

Hab. in caulibus *Asclepiadis syriacæ*, Ithaca New York. — Status conidiophorus est, teste Edgerton, *Glæosporium fusarioides* E. et K., cujus vero diagnosi videtur inedita.

3. *Glomerella Artocarpi* Delacroix, Bull. trim. Soc. Myc. de France, 3553
vol. XXI, p. 198-200, tab. XII — Peritheciis, cuticula rupta, superficialibus, epiphyllis, *Colletotricho* vel *Glæosporio* contiguus,

structura subcellulosa, rotundatis v. subdepressis, collo minuto, ostioliiformi, atque ad marginem foraminis hyphis, rectis, brevibus, septatis, pallide brunneis præditis, $130 \approx 70-85$; ascis aparaphysatis $65-70 \approx 10$, sublavatis vel cylindraceis vel oblongis, rectis vel interdum subcurvulis, in asco oblique monostichis, $15 \approx 4$.

Hab. in foliis emortuis *Artocarp*i incisæ ex Africa. — Exemplaria visa forte immatura, ex auctore ipso.

4. *Glomerella fructigena* (Clint.) Sacc. Syll. XVII, p. 573 et XVIII, 3554 p. 450 — Var. *Vaccinii* Shear, Bull. Torr. Bot. Cl. XXXIV (1907) pag. 314. — Conidiis curvulis tereti-subclavatis, rubescentibus, $12-18 \approx 4,5-6$; setulis raris occurrentibus; peritheciis subiculo panoso atro-brunneo fultis, subglobosis, leviter rostratis; ascis $60-72 \approx 10-12$; sporidiis sub-distichis, e hyalino brunneolis, granulosi, oblongo-ellipsoideis, $9-18 \approx 5-7,5$.

Hab. in foliis *Vaccinii macrocarpi*, New Jersey in America boreali.

APIOSPOROPSIS (Trav.) Giuditta Mariani in Atti Soc. ital. Sc. Nat. L (1911) p. 165 (Etym. ab *Apiospora* cujus est analogum genus) *Guignardia* subg. *Apiosporopsis* Trav. Fl. ital. crypt. Pyren. p. 391 (1905), *Sphaerognomonia* A. Potebnia in Ann. Mycol. (1910) p. 54. — Asci gnomoniacei seu tunica apice perforata præditi, sed perithecia erostrata *Guignardiæ*. Huc spectant: *Apiosporopsis carpinea* (Fr.) et *Ap. veneta* (Sacc. et Speg.). Quoad diagnoses cfr. Traverso l. c.

1. *Apiosporopsis Saccardiana* G. Mariani in Atti Soc. ital. Sc. Nat. 3555 L (1911) p. 165, fig. 1. — Peritheciis sparsis, hypophyllis, atris, globoso-depressis $200-300 \mu$. latis, foliorum parenchymate immer-sis, prominulis, epidermidem etiam in pagina superiore nigrefa-cientibus, ostiolo distincte conico, minuto præditis; ascis cylindra-ceis, breviter pedicellatis, apice bi-foveolatis, $80-100 \approx 8-9$, spurie paraphysatis; sporidiis typice monostichis, -ellipsoideo-oblongis, prope basim 1-septatis, $14-17 \approx 3,5-4$, hyalinis.

Hab. in foliis putrescentibus *Eriobotryæ japonicæ* prope S. Bento, circa Coimbra Lusitanicæ, novembri 1903. (A. MOLLER).

PHOMATOSPORA Sacc. — Syll. I p. 432, IX p. 589, XI p. 291, XIV p. 519, XVI p. 456.

1. *Phomatospora Fragariæ* Krieger et Behm, in Krieger Ann. Mycol. IV (1906) p. 39. — Peritheciis in hypophyllo dealbato di-

spersis innatis semiglobosis dein conoideo-prominentibus breviter rostratis, atris, excipulo parenchymatico glabro, tenui, subfusco, 100 μ . diam., ascis cylindraceis sessilibus apice rotundatis c. 70 \times 9, 8-sporis; sporidiis ovoideis, 1-cellularibus, hyalinis, strato mucoso obductis, 7-10 \times 4.5-5, 1-stichis; paraphysibus nullis.

Hab. ad folia anni præteriti *Fragaria vesca* pr. Königstein Saxoniae.

2. *Phomatospora Saccardoi* Rehm. Syll. f. II, p. 433, IX p. 590. — 3557

Var. *leptosphaerioides* Rehm., Contrib. Myc. Fl. Hung. Nővénytani Közlem. (1905) p. 1. — Peritheciis in epidermide longe lateque fuscata nidulantibus, 0,3 mm. diam., rostro peritheci longè prominente; sporidiis 10 \times 5.

Hab. ad caulem *Aconiti* putridum, Nagytarpataki-Völgi (Tátra) Hungariæ (Dr. LINHART).

3. *Phomatospora Trevoæ* Speg., Fungi Chilenses (1900) p. 32 cum 3558

icon. — Peritheciis laxè gregariis, lenticularibus pusillis, coriacellis epidermide tectis, 80-100 μ . diam.; ascis 6-18 in quoque perithecio, ovatis subsessilibus aparaphysatis, octosporis, 45-55 \times 15-20; sporidiis oblanceolatis hyalinis, 14-18 \times 5-6.

Hab. in ramis siccis emortuis *Trevoæ* trinervis San Bernardo prope Santjago, Chile Amer. austr.

4. *Phomatospora Kentiæ* Speg., An. Mus. Nac. Buenos Aires, t. XIX, 3559

(1909) p. 334. — Maculis effusis sordide pallescentibus; peritheciis pusillis sparsis v. obsolete seriatis, nigris, e globoso lenticularibus 120-150 μ . diam., primo epidermide velatis serius erumpentibus; ascis constipatis antice obtusiusculis postice in pedicellum breviusculum sensim attenuatis 75-90 \times 10-12, aparaphysatis v. paucissime pseudoparaphysatis, octosporis; sporidiis rectis v. oblique distichis cylindraceo-ellipsoideis 18-22 \times 5-6, utrinque obtusiusculis inaequalateralibus hyalinis v. nubilosus.

Hab. ad petiolos emortuos *Kentiæ* Balmoreanæ, Buenos Aires, Amer. austr. (E. AUTRAN).

5. *Phomatospora paulensis* Rehm, Ann. Mycol. V (1907) p. 524. — 3560

Peritheciis in maculis orbicularibus subochraceis, dilute cinereocinctis, epiphyllis, 3-8 mm. lat., innatis, arcte confertis in hypophyllo maculis minus conspicuis, dein emergentibus, semiglobosis, minutissime papillatis, poro conspicuo pertusis, nigris, subnitentibus in epiphyllis, 150-200 μ . diam., membranceis fusco-contextis; ascis cylindraceis, 70-80 \times 12, 8-sporis; sporidiis oblongoglobosis, 1-cellularibus, guttulis oleosis repletis, strato gelatinoso

tenuissimo obductis, hyalinis, 10-12 \times 7-8, 1-stichis; paraphysibus nullis.

Hab. in foliis coriaceis? Sao Paulo Brasilæ (USTERI). — *Phys. varianti* videtur subaffinis.

PAIDANIA Raciborski. Bull. Ac. Sc. Cracovie (1909) p. 350 (Etym. a botanico collect. sundanico PA IDAN). Cfr. v. Höhn. Fragm. z. Mykol. VII, pag. 17. — Perithecia parasitica phyllogena, semierem্পentia, conica, basi applanata, ostiolo acuto dehiscentia excipulo inferius tenui, superne in membranam crassam dense cellulosa, brunneam 3-5-lobam, conspicue radiatam hyalino-fimbriatam abeunte. Asci cylindracei octospori, paraphysati. Sporidia monosticha, ovoidea, continua, hyalina. — Ob membranam coriiformem, fimbriatam mox dignoscitur genus.

1. **Paidania Melastomacearum** Rac. l. c. v. Höhn. l. c. fig. 1. — Cha- 3561
racteres generis; perithecia brunnea, 220-310 μ . diam.; corona fimbriata 450-500 μ . lata, 100-120 μ . cr., asc. 90-96 \times 17-20; sporidia ovoideo-globulosa, intus minute granulosa, hyalina 13-15 \times 7.

Hab. in pag. infer. foliorum Dissochaetæ sp. Depok in M. Salak et Gedeh ins. Javæ.

PHYSALOSPORA Niessl — Syll. I p. 433, IX p. 591, XI p. 291, XIV p. 520, XVI p. 457, XVII p. 203.

1. **Physalospora Lardizabalæ** Speg., Fungi Chilenses (1910) pag. 34 3562
cum icon. — Maculis nullis; peritheciis hinc inde sparsis sæpius hypophyllis sublenticularibus minutis subcarbonaceis 100-120 μ . diam.; ascis cylindraceis non v. parvisse paraphysatis, 60-80 \times 6-7, octosporis; sporidiis oblique monastichis ellipsoideo-subfusoides, hyalinis, 10-12 \times 3-4.

Hab. in foliis Lardizabalæ biternatæ in silvis Carro de Caracol Concepcion, Chile Amer. austr. — Sporidia quandoque occurrunt subchlorina et subuniseptata.

2. **Physalospora Acænæ** P. Henn., Deutsche Südpolar-Exped. VIII 3563
(1906) p. 10 (extr.) tab. II, fig. 4. — Peritheciis innato-suberumpentibus, sparsis, subglobosis, atro-membranaceis, ostiolatis, 80-90 μ . diam.; ascis subclavatis, apice obtuse rotundatis, octosporis, 35-45 \times 4-6; paraphysibus filiformibus, flexuosis, hyalinis; sporidiis subdistichis, fusoides, utrinque subacutis, continuis, hyalinis 7-9 \times 3-3,5

Hab. in caulibus decorticatis *Acænæ ascendentis* in ins. Kerguelen Ocean. ind. (E. WERTH).

3. *Physalospora atro-inquinans* Rehm, Ann. Mycol. VI (1908) p. 317. 3564
Peritheciis in maculis epiphyllis foliorum vivorum orbicularibus, vix decoloratis -1 cm., lat. sub epidermide denigrata innatis eamque elevantibus, globulosis, demum denudatis, atris poro vix perspicuo pertusis, membranaceis, 0,1 mm. diam.; ascis cylindraceis, apice rotundatis 60-70 \times 10-12, 4-sporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, gregariis, guttulis oleosis repletis, hyalinis, 15 \times 9; paraphysibus subramosis, septatis 2 μ . cr.

Hab. ad folia viva *Papilionaceæ* (? *Phaeseoli*) Sao Francisco Brasiliæ (ULE). — A *Ph. Atragali* peritheciis epidermide leviter nigrificata tectis distinguenda videtur.

4. *Physalospora Ramosii* P. Henn., Hedwigii XLVII (1908) p. 257. 3565
— Maculis flavidulis v. obsoletis, sparsis; peritheciis epiphyllis gregariis, erumpentibus, pulvinatis, atris, opacis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 40-50 \times 8-12; sporidiis oblique monostichis v. subdistichis, subglobosis v. ovoideis, hyalinis, intus granulatis, hyalinis, 6-8 \times 5-7.

Hab. in foliis *Derridis* sp. Luzon Prov. Rizal, Ins. Philipp. (RAMOS).

5. *Physalospora congensis* P. Henn., in Fl. du Bas- et Moy.-Congo, 3566 v. II fasc. III (1908) p. 226. — Maculis rotundatis v. effusis, pallidis exarescentibus; peritheciis epiphyllis sparsis v. subconcentrice dispositis, punctiformibus subsphæroideis v. lenticularibus atris, 130-160 μ . diam.; ascis clavatis v. fusoides, vertice obtusis v. acutiusculis, 8-sporis, paraphysatis, 40-52 \times 6-10; sporidiis oblique monostichis v. subdistichis, ellipsoideis, continuis, hyalinis, 4-5 \times 3,5.

Hab. in foliis *Millettiæ*, Sonzo, Congo, (VANDERYST).

6. *Physalospora neglecta* Petch, Ann. R. Bot. Gard. Peradeniya IV 3567 Pt. IV (1909) p. 304. — Peritheciis 0,3 mm. circ. cr., gregariis, in cortice immersis dein erumpentibus, leniter depressis, papilla parva abrupta, 0,08 mm. diam. et 0,08-0,12 mm. alta præditis, nigris æqualibus; ascis 140-160 \times 35, clavatis, initio crasse tunicatis, octosporis; paraphysibus numerosis, septatis,asco brevioribus; sporidiis hyalinis, crasse tunicatis, inæquilateralibus, cymbiformibus, 32-40 \times 12-16, distichis.

Hab. in ramis vivis *Theæ* sp., in quibus corticem lacerat et callos cancriformes efformat, Kadugannava ins. Ceylon.

7. *Physalospora Bersamæ* Syd. Deutsche Zentral.-Afrika Exped. 3568 (1907-1908) II, p. 98. — Maculis amphigenis, irregularibus, indeterminatis, flavidis, 0,5-1,5 cm. latis; peritheciis in maculis numerosis, epiphyllis, gregariis, discretis, globulosis, 180-240 μ . diam., epidermide elevata tectis et ostiolo papilliformi, atro tantum prominulis; ascis clavatis, 70-80 \times 20-22, octosporis, paraphysatis; sporidiis distichis, ellipsoideis, utrinque rotundatis et grasse 1-guttulatis, continuis, hyalinis, 14-18 \times 10-12.

Hab. in foliis Bersamæ ninagongensis, prope Kissenje Africae trop.

8. *Physalospora Oreodaphnes* Theiss., Beih. Botan. Centralbl. Bd. 3569 XXVII (1910) Abt. II, p. 400. — Maculis in epiphyllis brunneo-nigrescentibus, in hypophyllo fusco-brunneis, 3-10 mm. latis; peritheciis epiphyllis in maculis densiuscule gregariis, innatis, atris, nitentibus, semigloboso-conoideis, 180-240 μ . diam., poro minutissimo pertuso; ascis cylindratis, p. sp. 58-72 \times 10-12, deorsum in pedicellum usque ad 30 μ . long. attenuatis; paraphysibus filiformibus; sporidiis monostichis, hyalinis, continuis, utrinque rotundatis, ellipsoideis, 12-14 \times 8-9 v. subglobosis 7-9 μ . diam.

Hab. in foliis emortuis Oreodaphnes vaccinioidis, Sao Leopoldo Rio Grande do Sul Brasilæ. — A *Ph. manaoensis* Henn. differt maculis, ascis, sporis majoribus etc.

9. *Physalospora Coffeæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3570 (1909) p. 334. — Peritheciis lenticularibus 90-100 μ . diam., obsolete ostiolatis glabris, membranaceo-coriaceis, contextu indistincte atro opaco donatis, sparsis v. sæpius densiuscule gregariis, macula effusa pallescente v. sordidula insidentibus; ascis cylindratis antice obtusis rotundatis, postice breviter attenuato-pedicellatis, 60-80 \times 5-8, octosporis, paraphysibus piliformibus longioribus densiusculis obvallatis; sporidiis sæpius distichis ex ellipsoideo cylindratis subnavicularibus 8-12 \times 8-4, utrinque obtusiusculis non vel minute biguttulatis, hyalinis.

Hab. ad ramulos decorticatos putrescentes Coffeæ arabicæ Oran prov. Salta Rep. Argentina Amer. austr.

10. *Physalospora Morindæ* Koord., Botan. Untersuch. (1907) p. 190, 3571 fig. 18, II. — Maculis orbicularibus v. oblongis arescendo flavescentibus, 10-15 mm. diam.; peritheciis amphigenis, gregariis, globoso-depressis, ostiolo punctiformi, atris, glabris, 100-110 μ . diam., tectis; ascis paraphysatis, clavatis, fasciculatis, 45-50 \times 10-12, crasse tunicatis, 8-sporis; sporidiis oblongis, continuis, hyalinis,

rectis v. subrectis, utrinque obtusis v. rotundatis, intus granulosis, 11-13 \times 4-5; paraphysibus paucis indistinctis.

Hab. in foliis vivis *Morindæ citrifoliæ* prope Purwore-djo prov. Ledu ins. Java (KOORDERS).

11. *Physalospora Clerodendri* Syd., in De Wildem., Flore Bas- 3572

Moy. Congo t. III, fasc. I (1909) Extr., p. 14. — Peritheciis epiphyllis, sine maculis, sed plerumque per totum folium v. magnam ejus partem æqualiter distributis, innato-erumpentibus, subglobosis, 120-180 μ . diam., pertusis, atris; ascis clavatis, apice obtusis, longissime stipitatis, p. sp. 45-60 \times 18-25, stipite usque ad 50 μ . longo, octosporis; sporidiis distichis v. irregulariter positis, oblongo-ellipsoideis, continuis, hyalinis, tandem hyalino-fusculis, 12-18 \times 6-7.

Hab. in foliis *Clerodendri* sp., Kisanu, Congo (VANDERYST).

12. *Physalospora Amphilobii* Rehm, Ann. Mycol. VII (1909) p. 536. 3573

— Peritheciis in epiphyllis foliorum hand maculorum juxta nervum primarium seriatim innatis, globulosis, papillula minutissima prominente, nigra, glabra, 0,12 mm. diam., parenchymatice contextis; ascis cylindraceis, 70-80 \times 12-14, octosporis, J.-; sporidiis oblongo-clavatis, unicellularibus, guttulatis, hyalinis, 20-22 \times 6-7, distichis; paraphysibus filiformibus.

Hab. in foliis *Amphilobii* Vauttieri, Sao Leopoldo Rio Grande do Sul Brasilæ (S. J. THEISSEN).

13. *Physalospora Kellermanii* Rehm, in Kellermann, Journ. of My- 3574

col. XIV (1908) pag. 5. — Peritheciis in utraque pagina foliorum languescentium, subinde fuscidulorum gregarie innatis, hemisphærice prominentibus, lenticularibus, glabris, atris, minutissime papillatis, demum foveolam nigram in folii parenchymate reliquentibus, parenchymatice fuscidule contextis, 0,2 mm. diam.; ascis cylindraceis, teneris, 60 \times 8, 8-sporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, guttulis minimis repletis, 12 \times 6, monostichis; paraphysibus filiformibus.

Hab. in foliis *Shillingiæ acutifoliæ*, Livingston Guatemalæ (KELLERMAN).

14. *Physalospora Hoyæ* v. Höhnelt, Fragm. z. Mykol., Sitzb. K. Ak. 3575

d. Wiss. Wien, Bd. CXIV Abt. I (1907) p. 122. — Peritheciis nigris, punctiformibus, sparsis v. lineatim subseriatis, amphigenis, areolis 3-4 mm. latis insidentibus, globosis, ostiolo obtuso erumpentibus, 120-180 μ . diam., contextu tenero, pallide brunneo; ascis clavatis, sessilibus, apice obtusis, teneris, octosporis, 60-90 \times 12-15, paraphysibus crassiusculis 3 μ . cr., multi-guttulatis, facile

diffuentibus obvallatis; sporidiis distichis, hyalinis, continuis, intus granulosus, elliptico-clavulatis, utrinque obtusulis. v. acutulis, 16-23 \times 6,5-8.

Hab. in foliis emortuis *Hoyæ* sp. in insulis Samoa Polynesiæ (Dr. RECHINGER). — Dispositio perithecorum interdum subdendritica. *Phys. affini* proxima.

15. *Physalospora Fagrææ* v. Höhnelt, *Fragm. z. Mykol., Sitzb. R.* 3576

Ak. d. Wiss. Wien Bd. CXVI Abt. I (1907) p. 123. — Peritheciis nigris, globosis, leviter prominulis, subinde annulo albido cinctis, membranaceo-firmis, 150-200 μ . diam., ostiolo subrotundo-depresso 32 μ . diam. præditis, hypophyllis late gregariis, maculam nullam gignentibus; ascis copiosis, clavatis breviter noduloso-stipitatis, sursum subtenuatis, octosporis, 50-80 \times 10-13, paraphysibus filiformibus, diffuentibus; sporidiis subdistichis, oblongo-fusoides, rectis, obtusulis, 18-23 \times 5-5,5, hyalinis, fartis v. granulosus.

Hab. in foliis *Fagrææ* sp. ex Loganiaceis pr. Utumapa ins. Samoa Polynesiæ (RECHINGER).

16. *Physalospora placida* Syd., *Ann. Mycol. VII* (1909) p. 544. — 3577

Maculis amphigenis, orbicularibus, in epiphyllis griseis, in hypophyllo brunneolis, linea elevata fusco-purpurea cinctis, 3-10 mm. diam.; peritheciis epiphyllis, epidermide diu tectis, lenticulari-globosis, apice papillula minuta atra nitida præditis, atris, 125-200 μ . diam.; ascis cylindræis v. cylindræo-fusiformibus, apice mox rotundatis, mox leniter attenuatis, basi breviter stipitatis, 62-88 \times 11-15, octosporis; sporidiis distichis, subcylindræis, apice rotundatis, basi plerumque attenuatis, rectis, continuis, hyalinis v. hyalino-chlorinis, 21-28 \times 4, plasmate sæpe bipartito; paraphysibus numerosis, filiformibus ascos superantibus.

Hab. in foliis vivis *Minusopis*, Africa or. lusitanica (C. W. HOWARD).

17. *Physalospora melastomicola* Speg., *Fungi Paulist., Rev. Mus. La* 3578

Plata t. XV (1903) p. 18. — Maculis amphigenis, primo pallescentibus, dein cinereo-arescentibus, limitatis, 2-4 mm. diam.; areola fusciscenti-rubescens plus minusve lata cinctis; peritheciis sæpius epiphyllis, laxe gregariis minutis, 80-100 μ . cr., glabris, coriacellis atris, contextu parenchymatico parum distincto fuligineo; ascis subcylindræis apice obtuse rotundatis v. subtruncatis, deorsum leniter cuneato-attenuatis, brevissime crasseque pedicellatis 60 \times 8-9, octosporis, paraphysibus paucis filiformibus obvallatis; sporidiis linearibus leviter inæquilateralibus, utrinque subacutius-

cule rotundatis 16-25 \times 3-4 hyalinis, continuis, rarius diblastis vel quadriguttulatis.

Hab. in foliis languidis Melastomaceæ cuiusdam, Ipiranga, Cambucy Brasilæ (USTERI).

18. *Physalospora Diapensiæ* Rehm, Ann. Mycol. VI (1908) p. 323. 3579

— Peritheciis in pagina superiore dealbata foliolorum gregariis, innato-erumpentibus, dein fere sessilibus, globulosis haud papillulatis, atris, glabris, membranaceis 100-120 μ . diam.; asci clavatis, ad basim latioribus, sessilibus, 8-sporis, 50 \times 10; sporidiis clavulatis, 1-cellularibus, utrinque rotundatis, hyalinis, 18-20 \times 5-6, distichis; paraphysibus?

Hab. in foliis *Diapensiæ lapponicæ*, in Lapponia (HELLBOM).

19. *Physalospora Crepiniana* Sacc. et March. Revue Myc. (1885) 3580

p. 145 — Teste Rehm, Ann. Mycol. VI (1908) p. 320 huc spectant: *Physalospora alpina* Speg. var. *Crepiniana* Sacc. Syll. IX, p. 594 et *Physalospora Empetri* Rostrup, Sacc. Syll. XVII, p. 583 — tamen species variat ascis nunc 100-110 \times 10-15, nunc 60-70 \times 15 et sporidiis modo 20-26 \times 10-11 et modo 15-18 \times 7-9.

20. *Physalospora Rhododendri* Naumann, Jahresb. d. Ver. f. angew. 3581

Bot. 1909, Berlin (1910) p. 161. — Peritheciis erumpentibus, epiphyllis, 140 μ . lat., 120 μ . alt.; ascis subteretibus 80 μ . longis, octosporis; sporidiis obovatis (lacrimi-formibus) continuis, 20 \times 8, hyalinis.

Hab. in foliis *Rhododendri* specierum cultarum in Germania. Folia infecta arescunt et exsiccantur, gemmæ moriuntur et tunc totus ramus perit.

21. *Physalospora leptidea* (Hazsl.) Sacc. et Trott., *Læstadia leptidea* 3582

Hazsl. Sphær. Hung. pag. 115, t. VI, f. 27, vix *Sphæria leptidea* Fr. Cfr. Syll. I, p. 535 et III p. 111. — Peritheciis globosis, erumpenti-superficialibus, nigris papillulatis, hypophyllis; ascis clavatis, apice obtuse rotundatis, deorsum breviter tenuato-stipulatis, octosporis, 16 μ . cr., paraphysibus copiosis filiformibus, ascum paullo superantibus obvallatis; sporidiis distichis v. subdistichis ellipsoideo-oblongis, obtusolis, 14-16 \times 4, continuis, hyalinis.

Hab. in foliis *Vaccinii Vitis-idææ* in Hungaria. — Paraphyses copiosissimæ, hinc non *Læstadia* (= *Guignardia*).

22. *Physalospora Vitis-idææ* Rehm, in Krieger Ann. Mycol. IV (1906) 3583

p. 40. — Peritheciis in hypophyllo minutato gregariis verrucosominutis, globosis, papillula conoidea solum prominente, glabris,

nigris, 150 μ . diam, excipulo tenui fusco parenchymatico-contexto, ad ostiolum subfimbriato; ascis, fusiformibus, teneris, 90-120 \times 20, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, 18-20 \times 9-10, strato mucoso tenui obductis, distichis; paraphysibus filiformibus, septatis, 3 μ . cr., non gelatinosis.

Hab. ad folia *Vaccinii* *Vitis*-idææ prope Königstein Germaniæ. — *Physalosporæ alpinæ* Speg. affinis.

23. *Physalospora Rhododendri* (De Not.) Rehm, Ann. Mycol. V (1907) 3584 p. 536. — Ita vocandæ, teste Rehm, *Sphærella Rhododendri* De Not. Sf. ital. p. 86, t. 96, seu *Læstadia Rhododendri* Sacc. Syll. f. I, p. 428 et *Physalospora alpina* Speg., Sacc. Syll. I, p. 436. — Sporidia variant 35-48 \times 8-12; paraphyses ramosæ. — Nascitur species frequens quoque in Alpibus Tiroliae ad folia *Rhododendri ferruginei* (REHM).

24. *Physalospora populina* Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 3585 p. 141. — Peritheciis innatis, sparsis, peridermio pustulato elevato tectis, intus pallide roseis, depressis, poro minuto, non prominulo pertusis, 250 \times 175; ascis clavato-cylindraceis, sessilibus, apice tenuatis, 69-75 \times 11-15, octosporis; paraphysibus initio numerosis, granulatis, septatis, 2,5-3 μ . cr., demum diffluentibus; sporidiis distichis, inferne monostichis, ellipsoideis v. oblongis, interdum inæquilateris, utrinque obtusis, primo grosse biguttatis, demum nubiloso-guttulatis 14-20 \times 5-7; pycnidiiis (*Phoma Maublanci* Sacc. et Tr.) globosis v. depressis, immersis, dein peridermio rupto semi-erumpentibus, poro pertusis, 225 μ . diam.; sporulis hyalinis ovoideis, 2-guttatis, 5-7 \times 2,5-3; sporophoris brevibus, vix conspicuis.
- Hab.* in ramulis emortuis *Populi carolinianæ* pr. Toulouse Galliæ.

25. *Physalospora Salicis* (Fuck.) Sacc. Syll. I, p. 439 — var. *gariella* Sacc. Ann. Mycol. VII (1909) p. 435. — Peritheciis late densiuscule gregariis; ascis tereti-fusoideis, 50 \times 8; sporidiis oblongo-ellipsoideis, 14 \times 4-5.

Hab. in ramis morientibus *Salicis vitellinæ*, Eichwalde pr. Berolinum (H. Sydow).

26. *Physalospora Elasticæ* Koord., Botan. Untersuch., (1907) p. 191 3587 fig. 18, I. — Peritheciis epiphyllis, sparsis v. gregariis, tectis ostiolo papillato erumpente, coriaceis, atris, glabris, discretis, 60-90 μ . diam.; ascis tereti-clavatis, paraphysatis, 40-55 \times 15-16, octosporis, fasciculatis, paraphysibus filiformibus, numerosissimis, hyalinis, 80 μ . longis, indivisis, continuis; sporidiis continuis, hyali-

nis, oblongis, utrinque rotundatis, rectis v. subrectis (haud allantoideis) 13-18 \approx 5-6.

Hab. in macula foliorum Fici elasticæ in insula Java (KOORDERS).

27. *Physalospora gregaria* Sacc. Syll. I, p. 435 — f. *Taxi* Feltg. 3588 Vorst. Pilz-Fl. Luxemb. IV (1905), p. 56. — A typo recedit peritheciis subsparsis nec gregariis, non emergentibus, sporidiis paullo brevioribus et crassioribus, 15-22 \approx 7-10, subovoideis.

Hab. in apice ramulorum *Taxi baccatæ* in Luxemburgia. Perithecia 150-200 μ . diam.; asci 70-110 \approx 15-20.

28. *Physalospora Phaseoli* P. Henn., Syll. XVII, p. 580 — var. 3589 *guatemalensis* Rehm in Kellerman Journ. of Mycol. XIV (1908) p. 4. — Maculis orbicularibus luteolis, 1-3 cm. latis, demum confluentibus; peritheciis dispersis, globulosis, nigris, demum hemisphærice prominentibus, 0,15-0,2 mm.; ascis 70-80 \approx 12; sporidiis oblongo-orbicularibus 9 \approx 8; monostichis; paraphysibus filiformibus 1,5 μ . cr.

Hab. in foliis plantæ ignotæ prope Guatemala Amer. centr. (KELLERMAN).

29. *Physalospora obtegens* Rehm, Ann. Mycol. V (1907) p. 524. — 3590 Peritheciis gregariis totum stipitem obtegentibus, innatis sub epidermide haud mutata, globulosis papillula minutissima prominentibus, atris, basi hyphis crebris ramosis septatis 3-5 μ . cr. fuscis obsessis, 120 μ . diam., membranaceo-contextis; ascis oblongis, apice rotundatis, 60-65 \approx 18, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus interdum guttam 1 oleosam magnam includentibus, hyalinis, 18 \approx 8-9, distichis; paraphysibus ramosis, teneris.

Hab. in arbore ignota vulgo « Achete », Sao Leopoldo, Rio Grande do Sul, Brasiliæ (RICK). — Habitus *Sphaerellæ*.

30. *Physalospora sanguinea* Rehm, Ann. Mycol. V (1907) p. 524. — 3591 Maculis amphigenis, orbicularibus, demum oblongis, in epiphyllis primitus sanguineis, distincte nigrosanguineo-marginatis, demum expallescentibus, planis, in hypophyllo item marginatis et bulbosoprominentibus, ochraceis, 0,5-1,5 cm. diam.; peritheciis in hypophyllo gregariis innatis globulosis nigris apice vix prominentibus, poro haud conspicuo, parenchymatico-fusco-contextis, 180 μ . diam.; ascis fusiformibus, apice rotundatis, sessilibus, teneris, 60-65 \approx 8-9 8-sporis; sporidis oblongis, rectis, utrinque rotundatis, 1-cellula-

ribus, hyalinis, 10-12 \approx 3,5 distichis; paraphysibus teneris, filiformibus, septatis.

Hab. in folio coriaceo in horto botani., Sao Paulo, Brasiliæ (USTERT). — Affinis videtur *Phys. juruancæ*.

31. *Physalospora Lapageriæ* Speg., Fungi Chilenses (1910) p. 33 cum 3592

icon. — Maculis nullis v. obsoletis; peritheciis laxè gregariis amphigenis innato-superficialibus minutis atris glabris submembranaceis, 100-125 μ . diam.; ascis subellipsoideis brevissime pedicellatis, 50-60 \times 16, pseudoparaphysibus percrassis longioribus obval-latis, 70-80 \times 10-12; sporidiis distichis, ellipsoideis hyalinis 16 \times 8

Hab. in foliis siccis *Lapageriæ roseæ* in silvis Cerro Caracol Concepcion Chile Amer. austr.

32. *Physalospora Orchidearum* P. Henn., Hedw. XLIV (1905) p. 170. 3593

— Peritheciis innatis, vertice atro-nitenti erumpentibus, membranaceis, c. 140-180 μ . diam.; ascis clavatis vel subfusoides, apice rotundatis, 8-sporis, 50-70 \times 8-12; paraphysibus filiformibus, hyalinis; sporidiis subdistichis cylindræis, utrinque obtusis, rectis vel curvulis, 2-guttulatis, continuis, hyalinis, 15-18 \times 4-5.

Hab. in caulibus emortuis *Tainiæ stellatæ* et *Læliæ Schillerianæ* in horto bot. Berolinensi.

33. *Physalospora amphidyma* H. et P. Syd., Ann. Mycol. III (1905) 3594

p. 184. — Maculis amphigenis, suborbicularibus, 3-5 mm. diam., albidis, bene linea rufo-purpurea elevata cinctis; peritheciis in utraque folii parte conspicuis, sparsis, minutis, punctiformibus, diutius tectis, vertice demum tantum erumpentibus, sed vix vel haud prominulis, globosis, atris, glabris, 100-140 μ . diam.; ascis clavato-cylindræis, apice attenuatis, subsessilibus, 45-55 \times 9-11, octosporis; sporidiis oblique distichis, oblongo-ellipsoideis, utrinque leniter attenuatis, continuis, hyalinis, 13-18 \times 3½; paraphysibus filiformibus, ascos æquantibus.

Hab. in foliis vivis *Dracænæ* Papahu, pr. Amani Africæ orient. (A. KARASEF).

34. *Physalospora Dracænæ* Sheldon, Journ. of Mycol. XIII (1907) 3595

p. 140. — Stat. conid. *Gloeosporii* sp. — Acervulis plerumque epiphyllis, fuscis, conidiis in massulas rubentes erumpentibus; peritheciis sphericis v. subphialiformibus et rostellatis, nigris; ascis filiformi-paraphysatis, clavatis; sporidiis conidiis similibus sed leviter curvis.

Hab. in foliis, quæ exsiccantur, *Dracænæ fragrantis* in

calidariis Virginiae Amer. bor. — Diagnosis imperfecta. Ob perithecia subrostrata potius *Glomerellæ* species.

35. *Physalospora antarctica* P. Henn., Deutsche Südpolar-Exped. 3596 VIII (1906) p. 10, t. II, f. 5 (extr.). — Peritheciis sparsis, innatis, ostiolo erumpentibus, ovoideis, fuscis, membranaceis, 65-80 μ . diam.; ascis clavatis, apice rotundatis, octosporis; 25-30 \times 5-7; paraphysibus filiformibus, obtusis, hyalinis, 1,5 μ . cr.; sporidiis subdistichis, fusoideis, utrinque acutiusculis, interdum 3-guttulatis, hyalinis, 10-15 \times 2,5-3,5.

Hab. in foliis Junci scheuchzerioidis in insula Possession et Kerguelen pr. polum australem (E. VANHOEFFEN et E. WERTH).

36. *Physalospora Moliniæ* Kirschst., Verh. Bot. Ver. Brandenb. 3597 XLVIII (1906) p. 55. — Peritheciis dense gregariis, minutis, globosis, nigris, breve rostellatis, immersis, dein paullo emergentibus; ascis clavatis, breve stipitatis, 40-50 \times 5-6, octosporis; sporidiis oblique monostichis, v. distichis, fusoideis, acutatis, leniter inaequilateris, continuis, 8-12 \times 4-5, hyalinis; paraphysibus filiformibus!

Hab. prope basim culmi emortui sed adhuc stantis Moliniæ cæruleæ, Rathenower Stadtforst, Brandenburg.

37. *Physalospora amianticola* Vouaux ap. Lesdain, Bull. Soc. bot. 3598 Fr. LVI (1909) p. 3. — Peritheciis vel tectis, vel emergentibus v. fere superficialibus, sparsis, membranaceo-carbonaceis, poro minimo simplici præditis 200 μ . diam., contextu pseudoparenchymatico, cellulis 3-4 μ . diam. fuscis; ascis, cylindraceis 4-8-sporis, 120 \times 12; sporidiis ellipsoideis, hyalinis, continuis, 20-22 \times 8-9, biseriatis, sæpe irregulariter multiguttulatis; paraphysibus agglutinatis.

Hab. in amianto contexto aëri diu exposito pr. Versailles Galliae.

38. *Physalospora Citharexyli* Rehm in Hedw. XL (1901) pag. 112, 3599 t. VI, f. 42 et in Rab.-Pazschke, F. Eur. n. 4161 (nomen nudum).

Hab. ad folia viva Citharexyli sp. in Brasilia (ULE). — Ex icone sporidia ellipsoidea, utrinque subtenuato-rotundata, 15-17 \times 5-6, hyalino-farcta, non guttata.

UROSPORELLA Atkins. — Syll. XIV p. 523.

1. *Urosporella argentinensis* Speg., An. Mus. Nac. Buenos Aires. 3600 t. XIX (1909) p. 335, cum icon. — Matrice omnino denudata obsolete vageve infuscata; peritheciis superficialibus vix basi inscul-

ptis (an primo epidermide velatis?) sparsis v. subseriatis, modice papillato-ostiolatis 150 μ . diam., membranaceo-coriacellis, contextu indistincto atro; ascis utrinque subattenuatis antice truncatis postice breviuscule crassiusculeque pedicellatis 115-125 \times 8-9, octosporis, paraphysibus filiformibus vix longioribus parvis obvallatis, sporidiis oblique monostichis non v. leviter inæquilateralibus 14-16 \times 7, hyalinis, semper grosse 1-v. 2-guttulatis (an initio tunica mucosa tenui vestitis?), utrinque 1-ciliatis, ciliis rectis 6-10 μ . long. rigidulis concoloribus.

Hab. ad caules aridos Echii plantaginei prope La Plata, Argentina Amer. austr. — An ab *U. americana* Atk. satis distincta?

TRABUTIA Sacc. et Roum. — Syll. I p. 449, IX p. 601, XI p. 293, XVI p. 463; XVII p. 587.

1. **Trabutia Erythrinæ** Riek in Ann. Mycol. III (1905) p. 239. — 3601
Stromate atro, clypeato, 1-2 mm. lato, sæpius confluyente, orbiculari, depresso, ostiolo exserto, ramos ambiente; ascis elliptico-clavatis, breviter et anguste pedicellatis, octosporis, 50-60 \times 25; sporidiis hyalinis vel olivaceis, ellipticis vel rectangularibus, granulis repletis, 20-25 \times 12-15; paraphysibus hyalinis.

Hab. in ramis Erythrinæ Cristæ-Galli in Brasilia. —
— Est *Trabutia* habitu dothideaceo.

2. **Trabutia Molleriana** Da Camara, Bol. Soc. Broteriana, XXV (1910) 3602
Extr. p. 6. — Peritheciis suborbiculatis v. globoso-depressis, subcarbonaceis, nigris in stromate erumpenti linearique immersis, modo gregariis, modo solitariis, (habitu fere sclerotioideo), ostiolo rotundo, minuto; ascis plus minus claviformibus, interdum cylindraceis, medio inflatis, non v. vix stipitatis, octosporis, 50-60 \times 8-10; sporidiis distichis, ellipsoideis, continuis, hyalinis, grosse biguttulatis, utrinque rotundatis, 10-12 \times 5-6.

Hab. in foliis Iridis sp. in horto botanico Coimbra Lusitaniæ (A. MOLLER).

WALLROTHIELLA Sacc. — Syll. I p. 455, IX p. 605, XI p. 294, XIV p. 524, XVI p. 465, XVII p. 587.

1. **Wallrothiella merdaria** Karst., Acta Soc. Fauna et Fl. fenn. XXVII, 3603
4 (1905) p. 7. — Peritheciis confertissimis matrici laxè adherentibus, sphaeroideis, atris, opacis, astomis, forte demum pertusis, parvis; ascis tereti-clavatis; sporidiis distichis v. submonostichis,

ellipsoideis, hyalinis, eguttatis, $17-20 \times 8-10$; paraphysibus haud discretis, flavescentibus, asci longitudine.

Hab. supra merdā humanā in sacellania Willnäs Fenniciæ.

TRICHOSPHERIA Fuck. — Syll. I p. 452, IX p. 602, XI p. 293, XIV p. 523, XVI p. 463, XVII p. 588.

1. *Trichosphæria paraënsis* Syd., Hedwigia XLIX (1909) p. 79. — 3604

Peritheciis sparsis, in mycelio atro effuso superficialibus, ovato-globosis, atris, coriaceo-carbonaceis, tandem collabescentibus, $200-300 \mu$. diam., setis rigidis atris apicem versus acutis, $70-125 \mu$. longis, $6-10 \mu$. crassis; mycelio repente, effuso, ex hyphis ramosis septatis fuscis $6-10 \mu$. crassis, conidia obclavata multiseptata fusca in flagellum perlongum dilutius producta tota usque ad 175μ . longa et basi usque ad 18μ . crassa gerentibus composito; ascis cylindraceo-clavatis, obtusis, p. sp. $45-62 \times 16-21$, stipite usque ad 40μ . longo et c. 7μ . crasso suffultis, octosporis; sporidiis irregulariter distichis late ellipsoideis, utrinque rotundatis, continuis, hyalinis, intus nubilosis, $15-20 \times 7-10$.

Hab. in ramis emortuis *Stenocalycis brasiliensis*, Para Brasiliæ (C. F. BAKER).

2. *Trichosphæria vagans* Boud. Ic. myc. III (1910) t. 574 (Ser. I, p. 2). 3605

— Atra, glabra, sed in subiculo mycelioso longe lateque expanso numerosim congesta; peritheciis turbinatis, vertice papillatis et circa otium saepe depressis; ascis numerosis, clavatis ad basim attenuatis, octosporis $70-80 \times 10-12$; sporidiis oblongo-fusoides, hyalinis, saepius intus 4-guttulatis, $15-19 \times 4-5$.

Hab. ad basim trunci *Cratægi Oxyacanthæ*, ad terram, Montmorency Galliciæ.

3. *Trichosphæria interpilosa* Fairm., Proc. Rochest. Ac. of Sc. IV 3606

(1906) p. 219. — Peritheciis sparsis, minutis, ovoideo-globosis, parce pilosis; pilis atro-brunneis, sursum dilutioribus; ostiolo minute papillato; ascis tereti-clavatis, $77-93 \times 10$, octosporis; sporidiis oblique monostichis ex ovoideo oblongis, continuis, granulosis, $13-14 \times 6-7$, interdum (ob pressionem) subsigmoideis, hyalinis.

Hab. in lignis putridis, Lyndonville N. Y. Amer. bor. — Perithecia subiculo obsoleto et inter pilos erectos brunneos inserta.

4. *Trichosphæria javensis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 3607

CXVIII (1909) pag. 335. — Peritheciis superficialibus, sparsis, opace nigris, ovoideis breve conoideis, 300μ . diam., infra glabris,

supra setulosis; setulis 10-15, brunneolis, 5-10-septatis, rigidulis, apice acutis obtusisve, pallidioribus 120-240 \times 10-14 (basi); contextu atro-brunneo, cellulis polyedricis 7-8 μ . diam.; ascis apapophysatis, teneris, clavatis, apice truncato-conoideis, deorsum in stipitem 30 μ . long. productis, octosporis, 80-100 \times 16; sporidiis subdistichis ellipsoideis, continuis, 12-14 \times 7-8, diu hyalinis, demum dilute brunneolis, grosse 1-guttatis.

Hab. in corticibus vivis arborum pr. Tjibodas ins. Javæ.

5. *Trichosphæria cupressina* Rehm, Ann. Mycol. III (1905) p. 520 8608 et V (1907) p. 517. — Peritheciis dispersis sessilibus, globulosis 270 μ . diam., parenchymatico-contextis fuscò-membranaceis, ubique setis rectis, glabris, acutatis, subfuscis, dispersis 120 \times 4-6 (ad basim) obsessis, nigris, basi hyphis nonnullis longis fuscis cinctis; ascis clavatis, apice rotundatis, 70-80 \times 15-18, 8-sporis; sporidiis fusiformibus vel subclavatis, altero apice rotundatis, interdum subcurvatis, 1-cellularibus, guttas oleosas 1-2 magnas includentibus, hyalinis, 18-24 \times 6-7, distichis; paraphysibus filiformibus, septatis.

Hab. ad folia Cupressi thyoidis, Newfield, N. Jersey Am. bor. (ELLIS). — *Trich. regulinæ* affinis.

6. *Trichosphæria bambusina* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 8609 CXVIII, Abt. I (1909) p. 336. — Peritheciis superficialibus, subiculo albo tenuissimo insertis, in greges minutos crebros dispositis, nigris, membranaceo-carbonaceis, globosis, 80-90 μ . diam., circulariter setosis; setulis rariusculis, continuis, acutis conico-tenuatis, rigidis, atro-brunneis, 20-32 \times 3-5, vertice areolam nudam ostiolo minuto pertusam relinquentibus; ascis apapophysatis, sessilibus, fusoideo-clavatis, octosporis, teneris, 24-28 \times 4-5,5; sporidiis distichis, oblongo-teretiusculis, rectis, v. curvulis, utrinque obtusulis, hyalinis, 4-guttulatis (simulate 4-cellularibus), 6-7 \times 1,5-2.

Hab. in culmis emortuis Bambusæ, Tjibodas ins. Javæ. — Subiculi hyphæ 1-2 μ . cr.

MIYOSHIA Kawamura, Journ. of Coll. of Sc. Imp. Univ. Tokyo v. XXIII (1907) fasc. II, tab. 1-5. (Etym. a professore japonico M. MIYOSHI). — Peritheciis subiculo nigro inserta, atra, subcarbonacea, brunneo-pilosa, globoso-conoidea, papillato-ostiolata. Asci elongati, paraphysati, octospori. Sporidia fusoidea, continua, hyalina, levia. — Adsunt conidia clavato-cylindracea, pluriseptata *Clasterosporii* ad instar.

1. *Miyoshia fusispora* Kawamura l. c. Charact. gen. — Subiculi hy- 8610

phis septatis, brunneis, laxis, subsimplicibus; peritheciis piriformibus, 500-600 \times 250-350; ascis cylindraceutis deorsum breviter tenuato-stipitatis, paraphysibus filiformibus, parce septatis obvallatis, octosporis; sporidiis oblique monostichis, fusoides rectis vel vix curvulis, utrinque acutulis, hyalinis, 28-33 \times 6-8, 1-guttulatis granulosisque; conidiis variis 50-120 \times 5-15, brunneis, dense et crasse multiseptatis.

Hab. in foliis Arundinariæ Narihira, quæ tigrino-maculantur, in Japonia.

BOTRYOSPHERIA Ces. et De Not. — Syll. I p. 456, IX p. 605. XI p. 295, XIV p. 524, XVI p. 467, XVII p. 590.

1. *Botryosphæria Berengeriana* De Not. — Syll. I, p. 457 — var. 3611
acerina Rehm, Ann. Mycol. VII (1909) p. 533. — Soris in rimis corticis interioris vetusti longe elongatis, 0,5-2 cm. longis, cortici denigrato innatis; peritheciis gregariis v. singularibus, dein emergentibus, papillulatis, poro pertusis, 0,5 mm. diam, foveolam atram denique relinquentibus. Ceterum ut in specie ipsa.

Hab. in ramis corticatis *Aceris macrophylli*, Washington Amer. bor. (E. T. et S. A. HARPER).

2. *Botryosphæria Jasmini* Chenant. in Bull. Soc. Sc. nat. Ouest Fran- 3612
ce (1910) p. 14, t. IV, f. 3. — Peritheciis minutis ex matrice nigrificata seriatis erumpentibus v. in matrice intacta insidentibus, sphaeroideis, nigris, granulosis; ostiis papillatis, conicis, obtusis; ascis stipitatis, clavatis v. cylindraceutis apice, incrassatis, pseudoparaphysibus articulatis obvallatis, 7-8-sporis; sporidiis distichis v. oblique monostichis, ellipsoideo-trigonis, inæqualibus, continuis, granulatis, hyalinis, 30-37 \times 12-16, demum (extra ascos) 1-2-septatis, dilutissime aureis, ad septa subconstrictis.

Hab. in cortice *Jasmini officinalis*, villa Kernevèz, Montereux in Gallia.

3. *Botryosphæria melioloides* Rehm, Ann. Mycol. V (1907) p. 524. 3613
— Peritheciis epiphyllis in folii superficie haud mutata in stroma orbiculare 2-3 mm. diam. usque ad 50 arcte congregatis, globulosis, atris giabris, poro perspicuo pertusis, siccis apice umbilicatis, 100-150 μ . diam., parenchymatice contextis; ascis clavatis, apice rotundatis incrassatisque, 60-65 \times 15-17, 8-sporis; sporidiis ellipsoideis utrinque obtusis, 1-cellularibus, hyalinis, 10-11 \times 5-5,5, distichis; paraphysibus filiformibus 2,5 μ . cr.

Hab. ad folia Compositæ (? *Vernonia*), Sao Paulo Bra-

siliæ (USTERI). — Habitus quasi *B. phyllachoroideæ*. In stromate occurrunt conidia 4-cellularia, hyalina, $20 \approx 3$ (speciei propria?).

4. *Botryosphæria Phormii* Speg., Ann. Mus. Nac. Buenos Aires 3614 t. XIX (1909) p. 335. — Matrice laxè effuseque dealbata; peritheciis stromate pusillo constipatis, globosis, minutis, $120-130 \mu$. diam. atris, contextu indistincto opaco; ascis antice obtusissimis crasseque tunicatis, postice breviter noduloseque pedicellatis, $60-65 \approx 20$, octosporis, paraphysibus densis submucosis cinctis; sporidiis distichis utrinque acutiuscule rotundatis, $18-20 \approx 7-9$ leniter inæquilateralibus, grosse 1-guttulatis hyalinis.

Hab. ad scapos florales *Phormii tenacis* in hortis La Plata, Argentina Amer. austr.

Sect. 3. Phæosporæ.

MÜLLERELLA Hepp — Syll. IX p. 495, XVII p. 593.

1. *Müllerella polyspora* Hepp — Syll. IX, p. 485. — var. *microspora* Ferr., Malpighia XX (1906) p. 141. — A typo dignoscitur sporidiis multo minoribus et non guttulatis.

Hab. in apotheciis *Biatoræ luteolæ* ad corticem *Quercus*, Alba Ital. bor. (Doct. G. FERRO). — Perithecia $120-140 \approx 84$; asci $50-60 \mu$. longi, clavati; sporidia numerosissima, $2,5-3 \approx 2$.

PHÆOPHOMATOSPORA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 339 (Etyim. *phæos* fuscus et *Phomatospora*). — Est *Phomatospora* sporidiis fuligineis prædita.

1. *Phæophomatospora argentinensis* Speg., l. c. p. 339, cum icon. — 3616 Matrice sæpius late irregulariterque infuscata; peritheciis minutissimis submembranaceis epidermide tectis dense gregariis, glabris, $90-100 \mu$. diam., ostiolo minuto impresso perforatis; ascis cylindraceis, brevissime pedicellatis, aparaphysatis, $70 \approx 6-8$; sporidiis oblique monostichis, ellipsoideo-navicularibus, parvulis, subopacis, $10-12 \approx 4-5$.

Hab. ad caules aridos subputrescentesque *Conii maculati* in arvis circa Santa Catarina, Buenos Aires, Rep. Argentina Amer. austr.

ANTHOSTOMELLA Sacc. — Syll. I p. 278, IX p. 505, XI p. 281, XIV p. 501, XVI p. 439, XVII p. 594.

1. *Anthostomella* Sullæ Montemartini, Riv. Patol. vegetale IV (1910) 3617 p. 166. — Simplex; peritheciis gregariis, majusculis, submembranaceis, contextu distincto parenchymatico, globosis, 300-500 μ ., ostiolo brevi conoideo superficiem attingente, peridermio circa ostiolum vix erumpente denigrato tectis; ascis cylindraceis, 70-75 \times 8-9, breviter stipitatis, apice rotundatis, octosporis, paraphysatis; sporidiis oblique monostichis, utrinque rotundatis, continuis, olivaceo-fuscis, 13 \times 7,5, paraphysibus filiformibus, continuis, intus granulosis, ascos æquantibus.

Hab. in foliis vivis Hedysari coronarii (vulg. Sullæ) Rimini, Italiæ mediæ. — Socia forma pycnidica: *Leptothyrium Sullæ* S. et T.: Maculis nigris; pycnidiciis simplicibus, scutiformibus, membranaceo-atris, epidermide atrata et irregulariter erumpente tectis; sporulis limoniformibus, minutis, 3-4 \times 2.

2. *Anthostomella* Cassinopsidis Rehm, Ann. Mycol. IV (1906) p. 441 3618 et V (1907) p. 545. — Peritheciis gregariis, innatis, epidermidem denigratam hemisphærice elevantibus, semper obtectis, modo papillula minuta poro perspicuo pertusa prominente, globosis, glabris, atris, carbonaceis, 1 mm. diam.; ascis cylindraceis, apice rotundatis, 300 \times 12-15, 8-sporis, jodii ope haud cæruleo-tinctis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, subfuscis, 18-20 \times 8-9, strato mucoso tenui obductis, 1-stichis; paraphysibus ramosis, septatis, 3 μ . cr.

Hab. ad ramulos Cassinopsidis ad Promontorium Bonæ Spei (MAC OWAN, comm. Dr. PAZSCHKE). — Affinis *Anth. africanae* et *Anth. Unedonis*.

3. *Anthostomella* ? Lingue Speg., Fungi Chilenses (1910) p. 37 cum 3619 icon. — Peritheciis subglobosis matrici infossa pauci-gregariis clypeo epidermico nigro nitido tectis, 120-150 μ . diam.; ascis linearibus octosporis, 100-120 \times 5, paraphysibus nullis; sporidiis elliptico-subfusoides utrinque acutis, pallide olivaceis, 11-13 \times 3-4.

Hab. in foliis putrescentibus Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr. — Forsan forma *Læstadiæ* (Guignardix) Lingue Speg.

4. ? *Anthostomella* Bonanseana Sacc., Ann. Mycol. VI (1908) p. 567. 3620 — Peritheciis gregariis, subcutaneo-erumpentibus, membranaceo-coriaceis, nigris, globosis, 200 μ . diam., apice obtusis ostioloque irregulariter circulari pertusis, contextu dense celluloso; ascis... non visis; sporidiis globosis levibus, atro-fuliginis, 7,5-8,5 μ . d.

Hab. in magnis ulceribus elevato-discoideis nec non circum ea

ad caules Cerei geometrizzantis, Apaseo, Guanasirato Mexici, Junio 1908 (BONANSEA). — Etsi ascos nullos viderim, species potius *Anthostomella* quam *Sphaeropsis* mihi videtur.

5. *Anthostomella bahiensis* (Hempel) Speg., in Rev. Facult. de Agro- 3621
nomia y Veterinaria, Buenos Aires II (1906) p. 304 et 310, f. A, *Calonectria bahiensis* Hemp. in Bol. da Agricult., n. 1. Janeiro (1904). — Peritheciis solitariis v. sæpius gregariis subseriatis, cortice immutato innato-subsuperficialibus, hemisphærico-conoideis, 1-1,5 mm. diam., 0,7 mm. alt., nigris nitidulis, ostiolo obsoleto demum perforatis, basi subapplanatis, carbonaceis, nucleo mucoso, demum pulverulento; ascis fugacissimis, fusoideo-subclavulatis, apice rotundatis, deorsum breviter cuneato-stipitatis, 200 × 35-40, sæpius hexasporis, paraphysatis (?); sporidiis distichis, rhomboido-ellipticis v. subnavicularibus, utrinque obtusulis, 60-70 × 20-30, continuis, levibus, opace nigris.

Hab. ad ramos Theobromæ Cacao, Bahia Brasilæ. — *Habitus* lichenoides, sed gonidia et thallus nulli.

6. *Anthostomella Arthropylli* Koord. Botan. Untersuchung. (1907) 3622
pag. 195, fig. 18 IV. — Peritheciis 1-4 in maculis orbicularibus parvis insidentibus, coriaceo-carbonaceis, glabris, globoso-depressis, peridermio circa ostiolum vix erumpens denigrato tectis, 120-150 μ . diam.; ascis oblongis, apice haud incrassatis 30-40 × 10-16 octosporis, paraphysatis; sporidiis continuis, fuliginis, muticis, ovoideo-oblongis, 15-22 × 7-10, utrinque rotundatis, prope apicem transverse hyalino-annulatis.

Hab. in foliis *Arthropylli diversifolii* prope Kaliwiro prov. Kedu insulæ Javæ, sept. 1905 (KOORDERS).

7. *Anthostomella subconica* Rehm, Ann. Mycol. V (1907) p. 537. — 3623
Peritheciis in caule plerumque haud denigrato dispersis vel gregariis, innatis, nigro-tectis, globulosis, ostiolo conico prominentibus, 0,5 mm. latis; ascis cylindraceis, apice rotundatis, 100-110 × 10, 8-sporis; sporidiis ellipsoideis, sæpe navicularibus, utrinque subacutatis, 1-cellularibus, crasse 2-guttatis, fuscis, strato mucoso tenui obductis, 10-12 × 5-7, 1-stichis; paraphysibus filiformibus, 3 μ . crassis.

Hab. ad caules siccos ? *Compositæ* in silva ad Kampenwand alpium Bavaricæ (Dr. REHM). — Peritheciis majusculis et sporidiorum forma et magnitudine a ceteris speciebus cauliculis videtur distincta.

8. *Anthostomella megaclypeata* Rehm, Ann. Mycol. V (1907) p. 537. 3624

— Caulibus late extus denigratis; peritheciis gregariis, clypeiformiter atratis, innatis, conoideo- vel hemisphærico-prominentibus, globulosis, ostiolo subconico brevi perspicuo poro pertuso, ca. 0,4-0,7 mm. latis; ascis cylindræis, 100-120 \times 10, octosporis; sporidiis ovoideis vel oblongis, utrinque obtusis, 1-cellularibus, fuscis, strato mucoso tenui obductis, 12-14 \times 7, monostichis; paraphysibus filiformibus.

Hab. ad caules putrescentes Labiatae in faucibus infra Kastelruth Tirolia austr. (Dr. REHM). — Peritheciis majusculis, demum in matrice foveolam relinquentibus, sporidiorumque forma facile dignoscitur.

9. *Anthostomella destruens* Shear, Bull. Torr. Bot. Club. XXXIV 3625 (1907) p. 313. — Peritheciis gregariis, submembranaceis, globosis v. subpiriformibus, 350-450 μ . diam., pro more vertice in ostiolum latiusculum pertusum productis; ascis octosporis, cylindræis, subsessilibus, 200-232 \times 15-18, aparaphysatis; sporidiis breviter ellipsoideis subinde inæquilateralibus, monostichis, primo hyalinis, dein flavo-brunneis, demum atro-brunneis, opacis, 16-24 \times 10,5-12.

Hab. ad ramos ægros Vaccinii macrocarpi, New Jersey et inde culta. — Paraphysibus deficientibus a typo generis desiscit.

10. *Anthostomella Osyridis* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3626 p. 402. — Peritheciis sparsis v. 2-3 confertis et ramos late occupantibus, cortice innatis, diu tectis, globosis, 70-130 μ . diam., ostiolo papillato erumpentibus et pro more clypeo atro cinctis; contextu laxo celluloso extus nigro, intus subolivaceo; ascis in quoque perithecio paucis oblongo-clavatis, apice tenuato-rotundatis, breviter abrupte pedicellatis, 60-80 \times 16-18, octosporis; sporidiis elliptico-fusoides, 17-20 \times 5-6, utrinque rotundatis, læte castaneis, inasco superne monostichis, infra irregulariter positiss, unicellularibus.

Hab. in ramulis emortuis Osyridis albæ, Ulcinj Montenegro.

11. *Anthostomella Elasticæ* Koord., Botan. Untersuch. (1907) p. 195, 3627 fig. 19 II. — Maculis nullis; pseudostromate vix conspicuo; peritheciis tectis, sparsis, coriaceo-carbonaceis, glabris, globosis, 120-150 μ . diam., epiphyllis, ostiolo breviusculo epidermidem perforante; ascis anguste vel crassiuscule cylindræis, apice haud incrassatis, 60-65 \times 5-10, aparaphysatis, sessilibus, tenuibus, mox evanescentibus; sporidiis continuis, atro-fuligineis, ellipsoideis, inæ-

quilateralibus, utrinque acutis, oblique monostichis, appendiculis, destitutis, 13-14 \approx 6-8.

Hab. in foliis putrescentibus Fici elasticæ prope Loano prov, Kedu ins. Java, majo 1906 (KOORDERS).

12. *Anthostomella Sequoiæ* Rehm, Ann. Mycol. V (1907) p. 525. — 3628

Peritheciis in maculis denigratis 1-2 mm. lat., demum late confluentibus innatis, plerumque singularibus, globulosis, subprominentibus, poro perspicuo pertusis, haud papillulatis, nigris, glabris, 0,5 mm. lat.; ascis cylindræis, 100 \approx 7, apice rotundatis, 8-sporis; sporidiis ellipsoideis, plerumque navicularibus, 1-cellularibus, 1-2-guttatis, fuscis, strato tenui mucoso obductis, 10-12 \approx 4-5, 1-stichis; paraphysibus filiformibus.

Hab. ad folium siccum Sequoiæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.). — *A. leucobasi* proxime affinis.

13. *Anthostomella Distachyæ* Maubl., Bull. Soc. Myc. Fr. XX (1905) 3629

p. 87, tab. VI, fig. 1. — Peritheciis sparsis, atris, innatis, globosis, epidermide punctiformi-nigrificata tectis, 500 μ . diam., ostiolo brevi vix erumpentibus; ascis cylindricis, breviter stipitatis, 120-125 \approx 12-13, filiformi-paraphysatis; sporidiis monostichis, ovoideis, utrinque obtusis, primum pallide fuscis, guttulatis, strato hyalino obvolutis, dein intense atro-fuscis, opacis, 13-15 \approx 7-8,5.

Hab. in ramis Ephedræ distachyæ in arenosis pr. ostium ligericum (Loire) Gallia.

14. *Anthostomella minor* Ell. et Ev. — Syll. IX, pag. 510 — var. 3630

micrasca Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 25. — Ascis (cum sporidiis monostichis) 50-54 \approx 3,5-4; (cum sporidiis partim distichis) 43 \approx 5,5; sporidiis 7,5-10 \approx 3-4.

Hab. in ramulis aridis in prov. Jujuy Argentina. — Secundum descriptionem in Syll. IX, p. 510, specimina hæc a typo differunt forma ascorum et sporidiorum, sporidiis vix inæquilateralibus, sæpe 4-5, distichis vel oblique transversim monostichis, utrinque acutiusculis, peritheciis sparsim gregariis, epidermidem nigricantem ostiolo cylindrico-conico perforantibus.

15. *Anthostomella Molleriana* Trav. et Spessa, Bol. Soc. Brot. XXV 3631

(1910) p. 169, t. I, f. 1. — Peritheciis adproximato-seriatis vel gregariis, cortice nigrificata tectis eamque pustulatim sublevantibus, interdum ostiolo vix erumpentibus, lenticularibus vel basi applanatis, atris; excipulo lateraliter stromatice effuso, 400-500 \approx 100-150, contextu indistincte pseudoparenchymatico, fuligineo-

atro; ascis clavato-ventricosis, apice rotundatis, spurie paraphysatis, octosporis, $40-50 \times 14-18$; sporidiis subdisticho-congestis, ovoideo-fusoideis, utrinque attenuato-rotundatis, initio hyalinis dein fuliginis, $12-14 \times 5-7$.

Hab. in petiolis siccis Phœnicis dactyliferæ in Horto botanico conimbricensi (A. MOLLER). — Ob perithecia circumcirca stromatice dilatata, species ad *Auerswaldiam* nutat. Cfr. Traverso, *Fl. it. crypt.* Pyren. p. 484-486.

16. *Anthostomella constipata* (Mont.) Sacc. — Syll. XI, p. 282. — 3632
var. *diminuta* Rehm, in Tranzsch. et Serebrianikow, Mycotheca rossica, fasc. II, n. 73, (1910). — Sporidiis $10-12 \mu$, strato mucoso 1μ . cr. obductis; porus jodo cærulescens.

Hab. in sarmentis Smilacis (?) in Rossia.

17. *Anthostomella Bromeliacæ* Rehm, Ann. Mycol. V (1907) p. 525. 3633
— Peritheciis in peridermio haud denigrato, sed maculatim dealbato innatis, dispersis, clypeo orbiculari nigro obtectis, 1 mm . latis, globulosis, atris, modo poro perspicuo prominentibus; ascis cylindraceis 130×6 , octosporis; sporidiis fusiformibus, rectis, 1-cellularibus; guttulis 1-3 oleosis repletis, fuscis, $14 \times 3-3,5$ monostichis; paraphysibus filiformibus, septatis, 3μ . cr.

Hab. ad folium Bromeliacæ, Sao Leopoldo, Rio Grande do Sul, Brasilia (Rick S. J.). — Affinis *Anthostomellæ eliminatæ* (B. et C.) Sacc.

18. *Anthostomella puyæcola* Speg., Fungi Chilenses (1910) p. 38. — 3634
Maculis amphigenis pallescentibus indeterminatis; peritheciis minutis immersis, sæpius epiphyllis, areola pusilla nigra cuticulari circa ostiolum donatis, 100μ . diam.; ascis cylindraceis breviter pedicellatis, crasse paraphysatis $80-90 \times 5-6$; sporidiis ellipsoideo-subnavicularibus, nudis, $8-10 \times 5-6$.

Hab. in foliis emortuis putrescentibus Puyæ cæruleæ, Cerro S. Cristobal de Santjago, Chile, Amer. austr.

19. *Anthostomella vestita* Speg., Fungi Chilenses (1910) pag. 39. — 3635
Maculis amphigenis pallescentibus indeterminatis; peritheciis minutis, areola stromatica nigra eximie coronatis, $150-180 \mu$. diám.; ascis linearibus octosporis, breviter pedicellatis, parce paraphysatis $110-120 \times 12-16$; sporidiis oblique v. transverse monostichis, ellipsoideis, non v. vix inæquilateralibus, fuliginis, subparvis, grosse-uninucleatis, $14-15 \times 9-10$, tunica hyalina mucosa sat crassa vestitis.

Hab. in foliis emortuis Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

20. *Anthostomella* ? *lonchosperma* Speg., An. Mus. Nac. Buenos Aires 3656
t. XIX (1909) pag. 340. — Maculis amphigenis sparsis repando-orbicularibus, 5-15 mm. diam., non impressis, obsolete determinatis, atris, per ætatem plus minusve pallescentibus; peritheciis epidermide tectis vix ostiolo minute papillato perforante manifestis, membranaceo-coriacellis, pusillis; ascis clavulatis aparaphysatis octosporis $110-120 \approx 20$; sporidiis oblique monostichis, lanceolatis v. clavulatis, primo hyalinis serius fuligineis, $32-46 \approx 10$, primum tunica mucosa hyalina vestitis et tunc $50-60 \approx 16-18$.

Hab. ad folia viva *Scirpi asperi* in uliginosis insulæ Santjago prope La Plata, Amer. austr.

21. *Anthostomella punctata* (Rob. et Desm.) Sacc. — Syll. I, p. 278. 3657
— var. *Nardi* Rehm, Ann. Mycol. VII (1909) p. 408. — Ascis cylindraceis, apice truncatis et incrassatis, $90 \approx 8$, octosporis; sporidiis obtuse ellipsoideis, plerumque subcurvatis, 1-cellularibus, grosse 2-guttatis, subfuscis, monostichis, $9 \approx 5-6$.

Hab. in foliis siccis *Nardi strictæ* in M. Arber in silva Bavarica (REHM).

22. *Anthostomella Danthoniæ* Mac Alp., Austral. Fungi Dec. I-II, 3638
p. 373 (Proceed. Linn. Soc. New S. Wal. 1902). — Minuta, nigra, gregaria, pustulata; peritheciis amphigenis, sed sæpius hypophyllis, tectis, dense confertis; seriatis, ostiolo albo-circumzonato erumpentibus, sæpe compressis; ascis cylindraceis vel undulatis, apice leviter tenuato-rotundatis, breviter stipitatis; octosporis, $140-150 \approx 19-20$, interdum ob sporidia disticha usque ad 28μ . cr.; sporidiis mono-distichis, brunneis, crasse tunicatis, ellipsoideis, $20-26 \approx 15-17$; paraphysibus tenuibus, $0,5-1 \mu$. cr., ascos superantibus, hyalinis v. coacervatis rubentibus, granulosis.

Hab. in foliis vaginisque *Danthoniæ penicillatæ*, Armona Viet. Australiæ (ROBINSON).

23. *Anthostomella rubicola* (Speg.) Sacc. et Trott., *Entosordaria rubicola* Speg., Fungi Chilenses (1910) p. 40, cum icon. — Peritheciis gregariis clypeo nigro communi tectis parvis, carbonaceis, 250μ . diam.; ascis cylindraceis breviter pedicellatis octosporis paraphysatis $150 \approx 8-10$; sporidiis cylindraceo-ellipsoideis, fuligineis grosse uninucleatis, $12 \approx 6$, utrinque hyalino-caudatis, cauda supera majori, infima minima.

Hab. in ramos emortuos *Rubi sancti* prope Ciudad de Valdivia, Chile Amer. austr. — Ab *Ent. appendiculosa* (B. et B.) Sacc. differt ascis paraphysatis, sporidiis minoribus bicaudatis.

24. *Anthostomella perseicola* (Speg.) Sacc. et Trott., *Entosordaria* 3640
perseicola Speg., Fungi Chilenses (1910) p. 40, cum icon. — Peritheciis immersis laxè pauci-gregariis ad hypophyllum areola minuta nigra coronatis, 120-130 μ . diam.; ascis linearibus aparaphysatis, 120 \times 5-6, octosporis; sporidiis rectis, monostichis, fuligineis cylindraceo-ellipsoideis utrinque obtusissimis atque cauda unguiformi hyalina appendiculatis, 10-12 \times 6.

Hab. in foliis emortuis putrescentibus Perseæ Lingue, Cerro Caracol de Concepcion, Chile Amer. austr.

25. *Anthostomella valparadisiaca* (Speg.) Sacc. et Trott., *Entosordaria* 3641
valparadisiaca Speg., Fungi Chilenses (1910), pag. 41. — Amphigena; maculis ad epiphyllum subflavescentibus indeterminatis ad hypophyllum albescentibus indeterminatis v. sæpe linea sinuosa stromatica nigra limitatis; peritheciis laxè gregariis omnino infossis, majusculis, clypeo nigro circa ostiolum donatis, 250-300 μ . diam.; ascis linearibus aparaphysatis breviter pedicellatis, 180-200 \times 10; sporidiis monostichis navicularibus utrinque globulo hyalino minuto appendiculatis, mediocribus, fuligineis, 24-26 \times 7-8.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

26. *Anthostomella micraspis* (Berk.) Sacc. et Trav. — Syll. XIX, 3642
p. 77, *Sphæria micraspis* Berk.; in Journ. of Bot. (1842) p. 156, t. VII, f. 9; Curr. Trans. Linn. Soc. XX (1859) p. 321, t. 58, f. 59. — Peritheciis sparsis, globoso-depressis, ostiolo papilliformi, crustæ applanato-hemisphæricæ innato-superficiali peritheciiformi immersis, parte prominente conico-hemisphærica pertusa; ascis..... sporidiis fusoides, rectis, utrinque obtusulis, maximis, 90 \times 20 (ex icone Curr.) brunneis, strato angusto hyalino tectis.

Hab. in lignis ad crustam rubram lichenosam in insulis Philippinensibus (H. CUMING). — Ex Currey l. c. forte *Verrucariæ* species.

PARANTHOSTOMELLA Speg., Fungi Chilenses (1910) p. 42 (Etym. *para* prope et *Anthostomella*). — Est *Anthostomella* clypeo nigro circa ostiolum destituta.

1. *Paranthostomella eryngiicola* Speg., l. c. p. 42 cum icon. — Ma. 3643
culis amphigenis pallescentibus indeterminatis; peritheciis parenchymate immersis, ostiolo nigro punctiformi coronatis, 200-250 μ . diam.; ascis subclavulatis, aparaphysatis, 120 \times 20-22, octosporis;

sporidiis distichis, elliptico-fusoides, utrinque acutissimis, exappendiculatis, obscure fuliginis, 32-34 \approx 10-11.

Hab. in foliis emortuis *Eryngii paniculati*, Cerro Caracol de Concepcion Chile Amer. austr.

2. *Paranthostomella valdiviana* Speg., Fungi Chilenses (1910) p. 44, 3644 cum icon. — Maculis nullis; peritheciis innato-erumpentibus subglobosis, atris, subcarbonaceis 100-120 μ . diam.; ascis linearibus aparaphysatis, breviter pedicellatis, octosporis, 70-75 \approx 7-8; sporidiis ellipsoideo-subnavicularibus, basi globulo hyalino auctis, fuliginis, nudis, 10-11 \approx 5, plerumque biguttulatis.

Hab. in foliis dejectis putrescentibus *Perseæ Lingue* prope Ciudad de Valdivia, Chile Amer. austr.

3. *Paranthostomella unciniicola* Speg., Fungi Chilenses (1910) p. 43, 3645 cum icon. — Paraentosordaria; maculis nullis; peritheciis globosis immersis 90-110 μ . diam.; ascis linearibus breviter pedicellatis paraphysatis, octosporis, 70-75 \approx 5-6; sporidiis monostichis, navicularibus, fuliginis, parvis, apice infero globulo hyalino auctis, 10-12 \approx 4-4.5, tunica mucosa tenui vestitis.

Hab. in foliis emortuis *Unciniæ erinaceæ* prope Ciudad de Valdivia, Chile Amer. austr.

BOMBARDIA Fr. — Syll. I p. 277, XVI p. 435.

1. *Bombardia comata* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 3646 (1906) p. 50. — Peritheciis sparsis, nigris, hemisphaericis, basi lata sessilibus, membranaceis, papilla brevi nitidula præditis, qua excepta, brunneo-tomentosis, 300-400 μ . diam., pilis tenuibus, flexuosis, ramosis 2 μ . cr.; ascis tereti-clavatis, sursum obtuse rotundatis, longiuscule stipitatis, 120-150 \approx 16-18, octosporis; sporidiis oblique monostichis v. disticho-conglobatis, primo cylindræis, utrinque rotundatis, copiose guttulatis, 25-35 \approx 5-6, dein ovoideis, atro-brunneis, vertice obtuse conoideis, basi applanatis, ibique appendice hyalina, recta, sporidii diam. æquante auctis, 16-18 \approx 10-11; paraphysibus copiosis, filiformibus, ramosis.

Hab. in ligno populino decorticato, udo, in Havel prope Rathenow Borussiae.

ROSELLINIA De Not. — Syll. I p. 252, IX p. 495, XI p. 280, XIV p. 494, XVI p. 435, XVII p. 595.

1. *Rosellinia Pepo* Patouill., Bull. Soc. Mycol. Fr. XXIV (1908) 3647 p. 9, cum icon. — Peritheciis sparsis v. gregariis, subiculo cru-

staceo conidifero insidentibus, globosis, substipitatis, 2,5-3 mm. diam., atro-brunneis, carbonaceis, ostiolo conico atro-nitenti semper clauso areola planiuscula obscuriori cincto donatis; ascis elongatis apice capitatis, obturaculo ovoideo, jodi ope cærulescenti præditis, inferne longe attenuatis, 8-sporis, 10-12 μ . latis; paraphysibus numerosis, linearibus; sporidiis brunneis, rectis, fusiformibus, utrinque acutis, magnis, 62-67 \times 8-9, halone hyalino utraque fine auctis dein nudatis.

Hab. in cortice *Hymenææ Courbaril*, Guadalupe (Duss). — Adsunt setulæ conidiferæ erectæ (*Graphium*) 1-3 mm. altæ, 30-60 μ . latæ, ex hyphis brunneis septatis, 4-6 μ . cr. compositæ, subiculo crustaceo sitæ; conidiis non visis.

2. *Rosellinia opunticola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3648 (1909) p. 338. — Peritheciis subconoideis, densiuscule constipatis primo ostiolo crasse umbonato tantum exertis, crusta pulverulenta alba vestitis dein denudatis, atris, glabris submembranaceis, contextu pellucido sed indistincto, atro-fuligineo; ascis apice truncatis deorsum breviter cuneato-pedicellatis, 150-160 \times 25-30, paraphysibus filiformibus commixtis; sporidiis octonis rectis v. oblique distichis navicularibus utrinque subacutiusculis medio turgidulis, 30-40 \times 14-16, non v. 2-guttulatis, atro-fuligineis.

Hab. ad lignum denudatum *Opuntia Fici-indicæ* prope Villa Maria Rep. Argentina, Amer. austr.

3. *Rosellinia andina* Speg., An. Mus. Nac. Buenos Aires t. XIX 3649 (1909) p. 337. — Matrice cortice orbata late diffuseque infusata; peritheciis semiexertis basi ligno insculptis, parvis 150-160 μ . diam., semper glabris, minute papillato-ostiolatis; ascis constipatis antice subtruncatis postice brevissime cuneato-pedicellatis, paraphysibus longioribus filiformibus obvallatis, 100 \times 10-12, octosporis; sporidiis rectis v. oblique monostichis, e fronte ellipsoideis e latere lenticulari-compressis, levibus, 14-15 \times 9-10, eguttulatis.

Hab. ad ramos emortuos Patagonii pinifolii in rupestribus prope Puente del Inca, Rep. Argentina Amer. austr.

4. *Rosellinia emergens* (B. et Br.) Sacc. — Syll. I, p. 257. — var. 3650 *bambusicola* Theiss., Ann. Mycol. VI (1908) p. 351. — Peritheciis arcte aggregatis (typice) vel subsparsis, depresso globosis 600-800 μ . diam. atris subnitentibus, ostiolo acuto nitido brevi, demum minutissime pertuso, serius e mycelio velutino emergentibus; subiculo brunneo-atro, tenui sed densissimo, continuo, velutino; ascis evanidis; sporidiis griseo-fuligineis, intus granulatis, rectis, raro pla-

noconvexis, utrinque subacutis, fusoideis, 55-80 \times 15-22 (interdum 90 μ . æquantibus).

Hab. ad culmos subputridos Guadua, Sao Leopoldo, Brasi-
liæ. — Perithecia circa papillam sæpe areola (interdum duplici)
applanata insignita. Cum *Ros. decipienti* Penz. et Sacc. non com-
paranda. An huc *Ros. sepulta* (B. et C.) Sacc.?

5. *Rosellinia valdiviensis* Speg., Fungi Chilenses (1910) p. 46, cum 3651
icon. — Peritheciis solitariis v. pauci-gregariis primo tectis dein
erumpenti-superficialibus subglobosis mediocribus, 500-800 μ . diam.,
papillato-ostiolatis carbonaceis, glabris levibus; ascis cylindraceis
breviter pedicellatis, subparaphysatis, 110 \times 15, octosporis; sporidiis
elliptico-elongatis, biguttulatis fuligineis, levibus 18-20 \times 9-10.

Hab. in ramis emortuis putrescentibus Perseæ Lingue
prope Ciudad de Valdivia, Chile Amer. austr. — *Ros. mammoideæ*
(Cke.) Sacc. affinis.

6. *Rosellinia procera* Syd., Ann. Mycol. VIII (1910) p. 37. — Pe- 3652
ritheciis sparsis vel aggregatis, glabris, globosis, firmis, 1 mm.
diam., distincte papillatis, atris, e subiculo denso tomentoso fusco
late effuso adnato persistenti emergentibus; ascis late cylindraceis,
apice rotundatis, 4-(?)sporidis, 120-160 \times 25-35; sporidiis fusiformibus,
utrinque sæpius attenuatis, continuis, fuscis, 70-140 \times 12-23, exap-
pendiculatis, tunica mucosa hyalina tenuissima vestitis.

Hab. ad corticem, Davao, Mindanao (E. B. COPELAND). — A
R. aquila, cui habitu accedit, mox distinguitur sporidiis multo
majoribus.

7. *Rosellinia australis* Speg., An. Mus. Nac. Buenos Aires t. XIX 3653
(1909) p. 337. — Peritheciis primo subiculo violaceo-gossypino
omnino tectis, serius denudatis, hinc inde dense constipatis globu-
losis 1,25-1,75 mm. diam., fusco-atris opacis levibus, superne non
v. obsoletissime applanato-areolatis, centro minute eximieque pa-
pillato-ostiolatis, duris, carbonaceis; ascis quandoque cylindraceis
quandoque subfusoideis 140-150 \times 10-12, antice rotundato-subtrun-
catis deorsum breviuscule cuneato-pedicellatis, octosporis, paraphy-
sibus filiformibus guttulatis longioribus obvallatis; sporidiis oblique
mono- v. distichis, navicularibus, 20-22 \times 8, primo tunica tenui hya-
lina obvolutis atque caudicula subglobosa etiam hyalina auctis, se-
rius nudis, opacis, fuligineis.

Hab. ad ligna putrida in hortis La Plata, Rep. Argentina A-
mer. austr. — Species statum ascophorum *Rostafinskiæ australis*
Sp. sistit.

8. *Rosellinia Desmazierii* (B. et Br.) Sacc. — Syll. I, pag. 254. — 3654
var. *acutispora* Theiss., Ann. Mycol. VI (1908) p. 350. — Ascis breviter pedicellatis, supra obtuse rotundatis, p. sp. 200-260 \times 8-10; sporidiis octonis, atris, lanceolatis, rectis curvulisve, acutissimis, appendice destitutis 42-50 \times 6-7; paraphysibus copiosis filiformibus; peritheciiis brunneis, papillâ minuta atra instructis.

Hab. ad ligna emortua, Sao Leopoldo Brasiliæ. — Subiculum speciem *Graphio Desmazierii* Sacc. peraffinem sistit. A typo differt sporidiis majoribus utrinque acutissimis. Differt quoque a *Rosell. bunodi* (B. et Br.) Sacc. peritheciiis non verrucosis.

9. *Rosellinia Bresadolæ* Theiss., Ann. Mycol. VI (1908) p. 351. — 3655
Peritheciiis aggregatis, conico-obovatis, 1 mm. altis, verrucoso-scruposis, atris, sub lente griseo-leprosis, papillatis, circa papillam pro more applanatis vel etiam, papillâ usque ad 600 μ . protractâ, rostratis; subiculo obsoleto vel, peritheciiis magis sparsis, subnullo, brunneo-atro; ascis cylindricis, octosporis p. sp. 200-220 \times 15; sporidiis atris, rectis v. plano-convexis v. curvatis, utrinque attenuatis, 30-40 \times 10-13.

Hab. ad ligna emortua, Sao Leopoldo Brasiliæ. — Perithecia interdum, sed rarò, breviter stipitata. A cl. Bresadola ut n. sp. declarata. Cf. Rick « Pilze aus Rio Grande do Sul » (Broteria 1906, pag. 50, cum icone T. I, f. 4) sub *Xylaria microcephala* Mont. — Var. *minor* Theiss., l. c. — Differt peritheciiis paullo minoribus, confertioribus sporidiisque minoribus; ascis 160-180 \times 9-11 p. sp., pedicello usque ad 120 μ . longo; sporidiis oblongo-fusoides, brunneo-atris, utrinque attenuatis, gutta una magna vel pluriguttatis, 27-36 \times 8-10. Cum typo.

10. *Rosellinia tricolor* Theiss., Ann. Mycol. VI (1908) pag. 351. — 3656
Subiculo obsoleto; peritheciiis confertis brunneis, 500-700 μ . diam., globosis, supra plerumque applanatis, papilla atra, ostiolo pertuso griseo-annulato; ascis p. sp. 200-230 \times 13-15; sporidiis oblongis, rarius late ellipticis, atris, rectis vel plano-convexis vel curvulis, typice grosse 1-guttatis, 32-45 \times 12-15.

Hab. in ligno putrido, Sao Leopoldo Brasiliæ.

11. *Rosellinia aquila* (Fr.) De Not. — Syll. I, p. 252. — var. *pal-* 3657
micola Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 392. — Peritheciiis subiculo lilacino-griseo furfuraceo insidentibus, dense gregariis, ad tertiam v. mediam partem liberis, ætate glabris, liberis (ob reductionem et evanescentiam subiculi) discretis, atris, asperulis, opacis, globosis, c. 1 mm. diam., papilla crassa

conica, subacuta, pulverulenta, aterrima; sporidiis atris, oblongis v. ellipsoideis, utrinque rotundatis, rarius acutiusculis, $25-32 \times 8-10$, grosse 1-guttulatis.

Hab. in ligno Palmarum, Sao Leopoldo Rio Grando do Sul Brasiliæ. — A typo differt colore et evanescentia subiculi.

12. *Rosellinia hyalospora* Theiss., Ann. Mycol. VI (1908) p. 351. — 3658

Peritheciis membranaceo-carbonaceis, fragilibus, arcte gregariis, globosis, $300-500 \mu$. diam., læte brunneis, subnitentibus, papilla atra pro ratione crassa instructis, basi immersis, ætate fusco-griseis; subiculo atro-pulverulento, tenuissimo, facile evanido vel omnino nullo; ascis cylindricis, octosporis, obtuse rotundatis, p. sp. $130-160 \times 9-10$; sporidiis oblongo-fusoideis utrinque acutatis vel angustato-rotundatis, irregulariter rotundatis, hyalinis, $22-27 \times 7-8$.

Hab. ad ligna corticata, Sao Leopoldo Brasilia. — Ubi sporidia jugiter hyalina maneant, species a typo generis separanda est. An potius *Wallrothiellæ* spec.?

13. *Rosellinia smilacina* Speg., An. Mus. Nac. Buenos Aires t. XIX 3659

(1909) pag. 339. — Matrice immutata v. plus minusve infusca; peritheciis hemisphæricis innato-superficialibus laxè gregariis seriùs glabris, vix papillato ostiolatis, carbonaceis, $400-600 \mu$. diam.; ascis cylindræis dense constipatis, antice obtuse rotundatis, postice brevissime pedicellatis, aparaphysatis, octosporis, $100-125 \times 8-15$; sporidiis eximie ellipsoideo-navicularibus, $16-20 \times 8-10$, primo tunica hyalina tenui vestitis dein denudatis, fuliginæis.

Hab. ad sarmenta *Smilacis campestris*, Parque Roca pr. Tucuman, Rep. Argentina Amer. austr.

14. *Rosellinia abscondita* Rehm, Hedw. XXVIII (1889) p. 356, non 3660

Tassi (1900) — Syll. XVI, p. 436 — quæ nunc *R. senensis* Trav. Fl. it. crypt. Pyr. pag. 459. — Peritheciis plerumque gregariis, sessilibus, subglobosis, basi lata insidentibus, apice conoideo-papillatis, fusco-nigris, scabris, duriusculis, parenchymaticis, $0,3-1 \text{ mm.}$ diam.; ascis cylindræo-clavatis, apice incrassatis, 120×15 , octosporis; sporidiis fusoideis v. subellipsoideis, rectis v. subcurvatis, 1-cellularibus, crasse 1-2-guttatis, $18-24 \times 4,5-5,5$, primitus hyalinis, dein fuscis, strato mucoso $3-4 \mu$. cr., obductis, 1-2-stichis; paraphysibus filiformibus, guttulatis, $3-4 \mu$. cr.

Hab. intra fasciculos foliorum graminis siccorum juxta glaciem æternam, Hochjoch vallis Oetz Tirolæ.

15. *Rosellinia geophila* B. R. S. in Saccardo, Not. Myc. VI, Ann. 3660*

Myc. v. III (1905) pag. 508. — Peritheciis sparsis v. interdum dense gregariis, conoideis, 300-350 μ . diam., carbonaceis, nigris, setulis rigidis, continuis, levibus, apice acutulis, fuligineis, 45-60 \times 4-4,5 undique ornatis, in mycelio e pilis flexuosis, septatis olivaceis formato semi-immersis; contextu carbonaceo; ascis cylindraceis, tenui-tunicatis, octosporis, 156-200 \times 15-17, paraphysibus granulosis confusis obvallatis; sporidiis monostichis, ellipsoideis, 24-30 \times 12-14, opace fuligineis.

Hab. ad terram arenosam inter muscos, La Panne pr. Furnes Belgii (M. ROUSSEAU). — Species prædistincta, forte e radiculis Barbulæ sp. oriens. Ad subgen. *Coniochaetæ* spectat.

16. *Rosellinia subverruculosa* Rehm, Ann. Mycol. V (1907) p. 526. 3661

— Peritheciis peridermio fuscidulo late expanso gregarie insidentibus, dein erumpentibus, lata basi sessilibus, subconicis, minutissime papillulatis, nigris, glabris, demum distincte verrucosis, carbonaceis, ca. 0,8 mm. diam.; ascis evanidis; sporidiis subnavicularibus, utrinque obtusis, 1-cellularibus, fuscis, 21-24 \times 10-11.

Hab. ad calamum Bambusæ, Sao Leopoldo, Rio grande do Sul, Brasilia (Rick S. J.) — *Ros. sublimbatæ* proxima. Ad subg. *Tassiellam* pertinet.

17. *Rosellinia nectrioides* Rehm, Ann. Mycol. VI (1908) p. 324. — 3662

Peritheciis in mycelio pulvinato, crasso, roseolo, ca. 1-1,5 mm. lato et alto, per epidermidem laciniatim disruptam emergente usque ad 20 arcte congregatis, sessilibus, conoideis, fusco-nigris, glabris, in ostiolum conoideum breve, nigrum elongatis, ca. 0,5 mm. diam., carbonaceis; ascis cylindraceis, perlongis, p. sporif. 120 \times 10, octosporis; sporidiis fusiformibus, utrinque subacutatis, rectis, interdum paullulum inæquilateralibus, unicellularibus, subfuscis, 18-20 \times 5, monostichis; paraphysibus filiformibus.

Hab. ad ramulum Cratægi sanguineæ, ad Instit. botan. silviculturæ Petropolitæ (Dr. TRANZSCHEL). — *R. andurnensi* affinis.

18. *Rosellinia catacrypta* Rehm, Ann. Mycol. V (1907) p. 537. — 3663

Peritheciis globosis, minutissimis, poro vix perspicuo pertusis pro maxima parte cortice semiimmersis, demum foveolam denigratam relinquentibus, gregariis, 150 μ . diam., contextu parenchymatico fusco-viridi; ascis cylindraceis, octosporis, 120 \times 8; sporidiis elliptico-oblongis, obtusis, interdum subcurvatis, dilute fuscidulis, 1-cellularibus, nucleo centrali magno præditis, 15-20 \times 6-7, monostichis; paraphysibus ramosis, ascos superantibus.

Hab. in cortice Piri Mali et Cerasorum prope Sugenheim Franconiaë mediæ (Dr. REHM). — Imprimis peritheciis minutissimis, fere abditis mox dignoscenda species. E subgen. *Amphispharellæ*.

19. *Rosellinia sancta-cruciana* Ferd. et Winge, Botanisk Tidsskr. 3664 XXIX (1908) p. 16, tab. II, fig. 4. — Peritheciis subiculo nullo, sulcis internerviis petioli insidentibus, superficialibus, subglobois, papillula semigloboso-conoidea, brevi, nitenti (nonnumquam disculo insidente) præditis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., ferrugineo-pruinosis, atro-fuscis; ascis anguste clavatis, superne rotundatis, in pedicellum longum leniter attenuatis, ostiolo jodi ope intense cærulescente, 150-200 (parte sp. 80-110) \approx 10-13; sporidiis irregulariter monostichis subdistichisve, octonis, oblongo-ellipsoideis, subnavicularibus, obtusulis v. breviter acutatis, tunica mucosa anguste adjacente, utrinque appendiculam saccato-subgloboisam, hyalinam 3-5 μ . cr. formante indutis, 16-20 \approx 6-7,5, 2-4-guttulatis, atro-castaneis; paraphysibus filiformibus, septatis, 3 μ . cr., ascos superantibus, evanescentibus.

Hab. ad petiolum siccum Coccoë nuciferæ in insula St. Croix Indiaë occ. (RAUNKIAER).

20. *Rosellinia cinereo-violascens* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. V (1905) p. 17. — Peritheciis inter fasciculos rigidos, rugosissimos, erectos, ex hyphis densissime conglutinatibus, fuscis, inæqualibus, septatis, 3,5-6 μ . crassis compositos orientibus, confertissime aggregatis, confluentibus et crustam longe lateque effusam facile formantibus, superficialibus, sphæroideis, vertice subapplanatis, vix papillulatis, poro minutissimo, areola nigra cincto perforatis, pulvere cinereo violascente ceterum obtectis, demum, jam evacuatis, crusta fere stromatica insidentibus, totis nigris, $\frac{1}{2}$ -1 mm. diam.; contextu densissimo, molliusculo, fere coriaceo-carbonaceo; ascis octosporis, cylindræis vel anguste cylindræo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 85-100 \approx 7,6 (p. sp.), cum pedicello circa 165 μ . longis; sporidiis monostichis, ellipsoideis, inæquilateralibus, utrinque acutiusculis, sæpe guttulatis; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in truncis mucidis humi jacentibus prope Laguna de la Brea prov. Jujuy Argentina et in Bolivia.

21. *Rosellinia breensis* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 17. — Peritheciis superficialibus, basi paullum infossis, longe lateque gregariis, sæpe confertissimis,

crustam formantibus, hemisphæricis, vertice semper applanatis, minute sed manifestim papillatis, carbonaceis, atratis, $\frac{1}{2}$ -1 mm. diam.; ascis octosporis, cylindraceis, sursum obtusis, longissime pedicellatis, jodo in areola minuta ad apicem cærulescentibus, 50-65 \times 6-7,5 (p. sp.); sporidiis dense vel imbricatum vel oblique monostichis, irregulariter ellipsoideis, inæquilateralibus, uni- vel sæpissime bi-guttulatis, fuscis, 9-11 \times 5-5,5; paraphysibus longissimis, latiusculis, mucilaginosis, multiguttulatis, c. 2,5 μ . crassis.

Hab. ad truncos aridos pr. Laguna de la Brea, prov. Jujuy Argentina. — *R. Linderæ* Peck peraffinis videtur, forma autem sporidiorum differt; *R. impositæ* Schw. quoad habitum affinis, sed sporidiis multo majoribus diversa.

22. *Rosellinia elæospora* Sacc. et Fairm., in Saccardo, Microm. A- 3667
mer. novi, Journ. of Myc. XII (1906) p. 48. — Peritheciis late et dense gregariis, superficialibus, globosis; glabris, circ. $\frac{1}{2}$ mm. diam., papillatis, senio papilla amissa perforatis, carbonaceis, nigris; ascis tereti-elongatis, deorsum tenuato-stipitatis, 60 \times 7-8, octosporis, filiformi-paraphysatis; sporidiis oblique monostichis, elliptico-navicularibus, inæquilateris, utrinque obtusatis, 13-15 \times 4,5-5, rarius usque ad 16 \times 5,6, fumoso-olivaceis, 2-3-guttulatis v. granulosis.

Hab. ad truncos putrescentes dejectos in silvis pr. Lydonville, N. Y. Amer. bor. — Præsertim sporidiis fumoso-olivaceis dignoscitur.

23. *Rosellinia metachroa* Ferd. et Winge, Botanisk Tidsskr. XXIX 3668
(1908) p. 16, tab. II, fig. 3. — Subiculo nullo; peritheciis matrice inquinata insidentibus, superficialibus, dense gregariis sæpeque in plagulas subeffusas confluentibus, globosis, usque ad $\frac{3}{4}$ mm. diam., pruina primo rubro-fusca, deinde cinereo-glauca, persistenti obtectis, superne nudis, atro-fuscis, subpapillatis, poro vix visibili perforatis; ascis lineariter cylindraceis, poro jodi ope cærulescente, in pedicellum longum leniter attenuatis, 135-170 (parte sp. 75-100) \times 6,5-8; sporidiis octonis, monostichis, oblongo-ellipsoideis, a latere visis utrinque acutiuscule rotundatis, subnavicularibus, 13-16 \times 5,5-6,7, 2-pluriguttulatis, atro-fuscis; paraphysibus filiformibus, longis 2-4 μ . cr., apice jodo cærulescentibus.

Hab. ad lignum corticatum v. nudum in insulis St. Croix et St. Jan Indiæ occ. (RAUNKIAER). — Species *Ros. cinereo-violascenti* Starb. proxima sed absentia subiculi, characteribus pruinae, habitu non stromatico sat diversa.

24. *Rosellinia pulchella* Syd., in De Wildem., Flore Bas-Moy. Congo 3669
t. III, fasc. I (1909) p. 17. — Peritheciis in ligno late nigrificato
superficialibus crustaceo-aggregatis, dense et æque congestis, sub-
confluentibusque, globosis, levibus, griseo-lilacinis, ostiolo distincto
papilliformi nigro, c. 350-400 μ . diam., carbonaceis; ascis cylin-
draceis, longe pedicellatis, p. sp. 55-80 \approx 6-7, octosporis; sporidiis
oblique monostichis, ellipsoideis, utrinque obtusis, fuscis, 1-cellu-
laribus, 8,5-12 \approx 4-5,5; paraphysibus filiformibus, numerosis.

Hab. in ligno decorticato, Kisantu, Congo, jan. 1907 (VANDE-
RYST). — Subgeneri *Coniomela* pertinet.

25. *Rosellinia similis* Sacc., Ann. Mycol. VI (1908) p. 564. — Peri- 3670
theciis laxè gregariis, globosis, superficialibus, minutis, nigris, le-
vibus, apice breviter obtuse papillatis, 160-200 μ . diam.; ascis cy-
lindræis breviter stipitatis, apice obtusulis, filiformi-paraphysatis,
60-70 \approx 7, octosporis; sporidiis monostichis ellipsoideis, 14 \approx 7, fu-
ligineis, 1-guttatis.

Hab. in truncis corticatis dejectis in silvis Lyndonville N. Y.,
Amer. bor. socia *Nectria epispheeria* (FAIRMAN). — Ab affini *R.*
rimulicola distinguitur peritheciis omnino levibus, sporidiis paullo
longioribus, guttulatis.

26. *Rosellinia rhachidis* Pat., Bull. Soc. Myc. de Fr. XXII (1906) 3671
p. 57. — Peritheciis sparsis, numerosis, in maculis dealbatis la-
tissimis laxè approximatis, basi insculptis, subglobosis, 0,3-0,5 mm.
diam., atris, carbonaceis, ostiolo conico-papillato; ascis 8-sporis,
cylindræis; sporidiis monostichis, ellipsoideis, atro-brunneis, sæpe
biguttulatis, 10 \approx 5.

Hab. in rhachide foliorum *Cocoës nuciferæ*, Motu Papeatee
Polynesiae gallicæ.

27. *Rosellinia Cocoës* P. Henn., Hedwigia XLVII (1908) p. 256. — 3672
Peritheciis gregariis superficialibus hemisphæricis v. subglobosis,
atro-carbonaceis, pruinosis, subrugulosis, ad ostiolum papillatum
sublevibus, ca. 0,7-1 mm. diam.; ascis cylindræo-clavatis, obtu-
sis, 8-sporis, paraphysatis, 90-100 \approx 7-8; sporidiis oblique monosti-
chis, ellipsoideis, inæquilateralibus, obtusiusculis vel acutiusculis,
atris, 13-16 \approx 6-8.

Hab. in pedunculis emortuis *Cocoës nuciferæ*, Mindanao,
Davao Ins. Philippin. (COPELAND).

28. *Rosellinia Bambusæ* P. Henn., Hedwigia XLVII (1908) p. 256. 3673
— Peritheciis culmicolis, gregariis, superficialibus, subhemisphæri-
cis, atro-carbonaceis, rugulosis, papillato-ostiolatis, ca. 0,5-1 mm.

diam.; ascis cylindraceis, 8-sporis, plerumque secedentibus; sporidiis oblique monostichis, oblongis, obtusis, atro-brunneis, $8-11 \approx 3-3.5$.

Hab. in ramis emortuis *Bambusæ*, Luzon, Prov. Pampanga Mt. Arayat, Ins. Philippin. (MERRILL). — A *Ros. gasteroide* E. et E. diversa.

29. *Rosellinia Rickii* Bres. in *Rick Fungi austro-amer. fasc. III-IV* 3674 n. 53, *Ann. Myc. v. IV* (1906) p. 310. — A *Rosellinia griseocincta* Starb. videtur tantum differre peritheciis pellicula albida initio omnino tectis, non anulo mucedineo griseo-cinctis.

Hab. ad truncos in Brasilia.

30. *Rosellinia cuprea* Rick, *Broteria V* (1906) p. 46. — Peritheciis 3675 subiculo rufo-citrino tectis, dein liberis, cupreo-sanguineis, glabris, splendentibus, ostiolis nigris $\frac{1}{2}$ mm. diam., aggregatis in formam *Hypoxyli*, intus initio citrinis; ascis $80 \approx 10$; sporidiis atro-brunneis $10-15 \approx 7$, apice sæpe truncato; paraphysibus conglutinis.

Hab. in ramis corticatis Ingæ, Rio Grande do Sul Brasiliæ.

31. *Rosellinia Victoriæ* Syd., *Ann. Myc. VI* (1908) p. 483. — Subi- 3676 culo albo late effuso, tandem sordide albo et plus vel minus evanescente; peritheciis plerumque dense gregariis confertisque, primo subiculo immersis, dein erumpentibus et subliberis, late globosconicis, levibus, atris, opacis, carbonaceis, papillatis, circa papillam sæpe albis, 300-600 μ . diam.; ascis anguste cylindraceis, longe pedicellatis, $60-80 \approx 5-7$, octosporis; sporidiis monostichis, fusoidis, inæquilateris, continuis, obscure brunneis, $9-11 \approx 5-6$.

Hab. ad truncos ecorticatos, County of Follett, Victoria, 1907 (F. M. READER).

32. *Rosellinia Bakeri* Ellis in *Torreyia V* (1909) p. 87. — Peritheciis 3677 sparsis vel 3-6 aggregatis, vel 3-4 seriatim dispositis, sed haud confluentibus, globosis, leniter asperulis, ostiolo minute papilliformi atro excepto, basi ligno paullum immersis, $\frac{1}{2}$ mm. diam.; ascis cylindraceis, breviter stipitatis, p. sp. $55-65 \approx 7-8$; sporidiis monostichis, acute ellipticis, præcipue uno fine acutis, subinæquilateris et leniter compressis, $8-10 \approx 4-4\frac{1}{2}$.

Hab. ad ramos emortuos *Urerae* spec. Nicaragua (C. F. BAKER). — Differt ab *R. compressa* peritheciis majoribus sporidiisque minoribus.

33. *Rosellinia variozona* Starb., *Ascom. Schwed. Chaco-Cordill.* 3678 *Exp., Arkiv f. Bot., Bd. V* (1905) p. 18, fig. 12. — Peritheciis sparsis, interdum subconfertis, primo plane immersis, vertice prominulis, deinde liberatis, reliquiis matricilibus dispersis, sphaeroi-

deis, minutissime papillulatis, mollissime verrucosis, contextu carnoso-coriaceo, nigro, 250-300 μ . diam.; ascis octosporis, cylindraceis, sursum rotundatis, brevissime pedicellatis, 50-63 \approx 6-7,5 (p. sporif.); sporidiis plerumque oblique et imbricatim monostichis, rarissime mediis distichis, forma quam maxime variis, breviter fusoides, utrinque fere acutiusculis vel ellipsoideis utrinque obtusis vel non raro orbicularibus, 10-13 \approx 5-6,5 vel 6-8 μ . diam.; paraphysibus copiosis, filiformibus, hyalinis.

Hab. in truncis aridis Salicis ad Rio Pilcomayo Boliviae. — Sporidiis forma quam maxime varia distincta videtur hæc species, quæ textura quoque valde a genere abhorret. Potius e subgen. *Amphisphærella*. An *Anthostomella*? — Var. *follicola* Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 394. — A typo differt peritheciis majoribus nempe 0,6-0,8 mm. diam. et distincte papillatis. — In foliis Rubiaceæ arborescentis in Brasilia.

34. *Rosellinia callimorphoides* Rehm, Ann. Mycol. V (1907) p. 537. 8679

— Peritheciis 6-30 in soros subrotundos congregatis, primitus ligno semiimmersis, conoideis, rarius hemisphærico-globosis, demum sessilibus, atris, subnitidis, in papillulam brevem conspicue pertusam abeuntibus, 0,5 mm. diam., subcarbonaceis; contextu parenchymatico fusco; ascis cylindraceis, octosporis, 100 \approx 6-8; sporidiis oblongis, plerumque rectis, obtusis, 1-cellularibus, fuscis, 14-15 \approx 4,5, monostichis; paraphysibus filiformibus, hyalinis, longis, ca. 3 μ . crassis.

Hab. ad trabes Pini Cembrae infra Sulden, Ortler, alpium Tiroliae, alt. ca. 2000 m. (Dr. REHM). — Ad subgen. *Amphisphærellam* pertinet et *R. callimorphæ* accedit.

35. *Rosellinia*? *glomerata* (Viala) Sacc. et Trav. — Syll. XX, p. 700 8680

— *Dematophora glomerata* Viala, Mal. de la Vigne, pag. 301-307, cum iconibus. — Mycelio brunneo irregulariter ramoso, flexuoso, filiformi, 2 μ . cr.; sclerotiis e mycelio oriundis, globulosis v. oblongis nigris, minutissimis, 25-35 μ . diam., duris; pycnidiis ex evolutione sclerotii ortis, globosis, nigris, astomis copiosissimis, hyphulis flexuosis conspersis, tenuiter parenchymaticis, 90 μ . diam., sporulis innumeris, sessilibus, ellipsoideis, hyalinis, 3 μ . long.; conidiophoris (synnematis ex eodem mycelio ortis) (*Stysanus glomeratus* Sacc.) filiformibus, 3-8-fasciculatis, 1,5-2,3 mm. longis, nigris, rigidulis, rectis, ex hyphis angustissimis septatis, brunneis dense coalitis formatis, parte fertili fusoides-cylindrica indivisa rarius ramulosa, brunneola (typhiformi!), ramulis ultimis conidigeris ob-

clavatis; conidiis ovoideis crassiuscule tunicatis, $5,5 \times 4$, dilutissime fuscellis; peritheciis . . . ignotis.

Hab. in radicibus basique trunci *Vitis viniferæ*, præsertim Hérault, Landes, Vaucluse Galliæ. — *Ros. necatrix* affinis sed panicula conidiophora non alba, conidiis majoribus etc. dignoscenda. Rarior, sed æque necatrix.

36. *Rosellinia* spec. Roll. in Bull. Soc. myc. Fr. (1905) p. 23, *Sphæria* 3681 *Wolffensteniana* Kühn (certe inedita).

Hab. in radicibus Citri Aurantii, cui valde noxia, in insulis Balearibus et Valentini Hispaniæ (OTTO WOLFFENSTENI, Inst. agronom. valentini director). — Fere absque dubio est *Rosellinia necatrix* v. ejus forma.

HELMINTHOSPHERIA Fuck — Syll. I p. 230.

1. *Helminthosphæria Odontiae* v. Höhnelt, Fragm. z. Mykol. III, Sitzb. d. 3682 k. Ak. d. Wissensch. Wien, Bd. CXVI, Abt. I (1907) p. 108. — Peritheciis innatis dein erumpenti-superficialibus, dense gregariis, membranaceo-carbonaceis, nigris, globosis, distincte papillatis, $210-250 \mu$. diam., superne calvis, ceterum setis atris v. atro-violaceo-brunneis, crebriusculis, continuis, $50 \times 3-4$ vestitis; contextu indistincte celluloso; ascis parcissime paraphysatis, cylindraceis, $70 \times 7-8$, octosporis; sporidiis monostichis, continuis, atro-cyaneis, diaphanis, 2-guttatis, oblongo-ellipsoideis, pro more rectis, non compressis, $6-9,5 \times 3,5-4$.

Hab. in hymenio *Odontiae cristulatæ*, parasitice, ad truncum fagineum pr. Pressbaum, Wienerwald Austriæ.

2. *Helminthosphæria Corticiorum* v. Höhnelt, Fragm. z. Myk. III, Sitzb. 3683 k. Ak. d. Wissensch. Wien. Bd. CXVI, Abt. I (1907) p. 109. — Peritheciis gregariis, nigris, membranaceo-carbonaceis, asperulis, initio innatis, dein semiemergentibus, globoso-ovoides, 500×300 basi hyphis parvis $4-5 \mu$. cr. brunneis præditis, sursum, præcipue circa ostiolum, setulis $60 \times 6-7$, obtusis, crasse tunicatis, griseo-brunneis, plus minus copiosis vestitis; ascis filiformi-paraphysatis, cylindraceis, $110-120 \times 7$, octosporis; sporidiis ellipsoideo-fusoideis, utrinque obtusulis, continuis, 1- dein 2-4-guttatis, monostichis, fumoso-brunneolis, diaphanis, $13-16 \times 5-6$.

Hab. parasitice in hymenio *Peniophoræ cremæ* ad Danubium pr. Tulln Austriæ. — Sporidia extra ascum rarius bicellularia fiunt.

CHÆTOMIUM Kunze — Syll. I p. 220, IX p. 484, XI p. 279, XIV p. 490, XVI p. 428, XVII p. 600. — Cl. G. BAINIER in Bull. Soc. myc. Fr. (1909) pp. 191-231, multas species novas *Chætomii* exhibet sine diagnosi systematica sed earum conspectum synopticum affert, quem studiosorum commodo hic referimus. Species nonnullæ jam editæ interjectæ sunt.

I. Setæ perithecii non ramosæ nec anastomoticæ.

A. Setæ rectæ v. undulatæ, non apice circinatæ.

† Setæ non furcatæ.

a. Setæ fere rectilineæ.

Ch. affine

b. Setæ distincte undulatæ.

Ch. Kunzeanum

†† Setæ furcatæ.

Ch. megalocarpum

B. Setæ sursum circinatæ.

Ch. murorum

C. Setæ spirales.

† Sporidia majuscula fusioidea.

a. Setæ omnes spirales.

Ch. spirilliferum

b. Setæ bifformes.

§ Ostioli setæ parvæ.

Ch. contortum

§§ Setæ copiosissimæ.

α Setæ in spiram longam æquiorassam convolutæ.

Ch. spirale

β Setæ in spiram sursum sensim tenuatam convolutæ.

Ch. undulatum

γ Setæ in spiram irregularem apice cuspidatam convolutæ.

Ch. setosum

†† Sporidia minora subsphæroidea.

a. Setæ echinulatæ v. longe cuspidatæ.

Ch. bostrychodes

b. Setæ leves non cuspidatæ.

Ch. comosum

D. Setæ crispatæ.

† Setæ in area nigra sup. perithecii tantum insertæ.

Ch. glabrum

†† Setæ ostioli crispæ et echinulatæ.

Ch. crispatum

††† Setæ ostioli crispæ, curvatæ et granulosæ.

Ch. tortile

II. Setæ ramosæ, non anastomoticæ.

A. Rami rari, interdum difficile percipiendi.

† Setæ in spiram confertam convolutæ.

Ch. formosum

†† Setæ in spiram laxam æqualem convolutæ, perithecia ovoidea var. ovatum

††† Setæ in spiram laxam sursum tenuatam convolutæ.

var. neglectum

B. Rami copiosi, vere manifesti.

† Setæ rectæ plus v. minus regulariter dichotomæ.

a. Perithecia et sporidia minuta.	Ch. indicum
b. Perithecia et sporidia majuscula.	Ch. elatum
†† Setæ in dichotomias plerumque unilaterales.	Ch. chartarum
††† Setæ et ramuli spiraliter convoluti.	Ch. caprinum
†††† Setæ irregulariter ramosæ et torulosæ.	Ch. torulosum

III. Setæ ramosæ et anastomoticæ.

A. Setæ polymorphæ, majores pleræque anastomoticæ.	Ch. Cuniculorum
B. Setæ polymorphæ, crassiores longiores simplices, tenuiores ramosæ et anastomoticæ.	C. rigidulum

1. *Chætomium megalocarpum* Bain, Bull. Soc. Mycol. Fr. XXV (1909) 3684 p. 202, t. 16, f. 1-4. — Perithecia varia, majora, 280 × 196; setulæ prælongæ 2,8 µ. cr., simplices v. furcatæ fuliginæ; asci clavati, breviter stipitati, octospori; sporidia majuscula, nunc irregulariter sphæroidea, 14-16 µ. diam., nunc ovoidea 14-16 × 10.

Hab. in charta emporetica putrescente in Gallia. — Var. *chlorinum* Bain., l. c. toto fungo viridi-chlorino. In petiolis et caule putri Eryngii in Gallia.

2. *Chætomium spirilliferum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3685 p. 207, t. 17, f. 1-4. — Perithecia globulosa, 525 µ. diam., e griseo nigricantia; setulæ 2,8 µ. cr., in spiram 22 µ. latam convolutæ; asci clavati; octospori; sporidia oliviformia, 16-17 × 8,4 flavo-viridula.

Hab. in excremento Arietum in Gallia.

3. *Chætomium contortum* Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3686 p. 205, t. 13, f. 5-6. — Perithecia sphæroideo-ovoidea, 300 × 252, initio cyanescentia dein nigricantia; setulæ 4 µ. diam., sursum in spiram 56 µ. latam convolutæ; asci clavati, octospori; sporidia fusioidea, 14 × 9, ex olivaceo brunnea.

Hab. in excrementis Arietum et aliorum animalium in Gallia.

4. *Chætomium undulatum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3687 pag. 208, t. 14, f. 4-7. — Perithecia globulosa v. ovoidea, 252 × 224; setulæ 4 µ. cr., undulatæ; asci oblongo-clavati, octospori; sporidia fusioidea, 14-15 × 8, e latere 6 µ. cr., brunneola.

Hab. in frustulis ligneis terra infossis in Gallia.

5. *Chætomium setosum* Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3688 p. 209, t. 18, f. 3-7. — Perithecia subsphærica, 280 × 252; setulæ basi 4 µ. cr., bifformes; spira 25 µ. cr.; asci clavati, octospori;

sporidia subsphærica, 8-10 μ . diam., utrinque minutissime apiculata.

Hab. in palea uda in Gallia.

6. *Chætomium comosum* Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3689 pag. 211, t. 17, f. 5-8. — Perithecia initio cyanescentia, ovoidea, $200 \approx 160$; setulæ 240-280 μ . long. in spiram 16-20 μ . latam convolutæ; asci clavati, octospori; sporidia sphæroidea, cyanescentia 4-6 μ ., diam., subinde versiformia.

Hab. in fimo equino in Gallia.

7. *Chætomium tortile* Bain., Bull. Soc. Mycol. France, XXV (1909) 3690 p. 214, t. 22. — Perithecia subsphærica 370 μ . diam., virentia; setulæ biformes, 5,6 μ . diam.; asci cylindranei octospori; sporidia nunc sphæroidea 8 μ . diam., nunc ovoidea $8 \approx 6$, monosticha

Hab. in Gallia (matrice non indicata).

8. *Chætomium glabrum* Bain., Bull. Soc. Mycol. France XXV (1909) 3691 pag. 214, t. 21, f. 1-4. — Perithecia deorsum ad $\frac{2}{3}$ v. $\frac{3}{4}$ glabra, 367 μ . diam., superne nigricantia, deorsum subincoloria; asci cylindranei, octospori; sporidia e sphærico ovoidea, $10 \approx 8$, e latere 6,5 μ . lat., brunneola.

Hab. in excremento canino in Gallia.

9. *Chætomium formosum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3692 pag. 215, t. 20, f. 6-9. — Perithecia 294 μ . alta, 196 (basi) lat.; setulæ 3,5 μ . crassæ, in spiram basi 42, supra 25 μ . diam. convolutæ; asci clavati, octospori; sporidia subsphærica, 4-6 μ . diam., utrinque minutissime apiculata, griseo-cyanescentia.

Hab. in fimo Arietum in Gallia. — Var. *ovatum* Bain., l. c. p. 216, t. 20, f. 1-5. — Dignoscitur peritheciis ovoideis, $490 \approx 260$; sporidia sphærica et subinde ovoidea, cyanescentia, $6 \approx 4-5,6$. — In Gallia (matrice non indicata). — Var. *neglectum* Bain. l. c. — Imprimis setularum spira sursum sensim tenuata, non æquali dignoscendum. — In Gallia (matrice non indicata).

10. *Chætomium caprinum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3693 p. 223, t. 14, f. 1-3. — Perithecia ovoideo-piriformia, $525 \approx 225$, translucida; setulæ $180 \approx 3$, longiores 275 μ . long.; asci ovoidei, octospori; sporidia subsphærica, 7 μ . diam., dilute olivacea, e latere compresso-fusoidea, $7 \approx 5,6$.

Hab. in excrementis Caprarum in Gallia.

11. *Chætomium torulosum* Bain., Bull. Soc. Mycol. France, XXV 3694 (1909) p. 224, t. 23. — Perithecia flavo-ochracea, $294 \approx 148$; setulæ 285 μ . long.; sporidia $8 \approx 6$; olivaceo-fuliginea.

Hab. in Gallia (matrice non indicata).

12. *Chætomium rigidulum* Bain., Bull. Soc. Mycol. Fr., XXV (1909) 3695
p. 228, t. 26. — Perithecia 300 μ . diam.; setulæ majores 300-400 \times 6; asci clavati, octospori; sporidia 8 \times 6, utrinque subapiculata.

Hab. in excrementis Cuniculorum in silvis, in Gallia.

13. *Chætomium Oospora* Beauverie, Etud. polymorph. pag. 215-218 3696
et fig. 65-69 (sine diagnosi). — Peritheciis globosis, verruculosis, setosis, setulis in medietate sup. perithecii prælongis, erectis, tortuosis, perithecii diametro sesquolongioribus, inferioribus multo brevioribus divergentibus vix flexis, basilaribus repentibus; ascis clavatis longiuscule sensim stipitatis, octosporis, apice rotundatis; sporidiis distichis, ovoideis, 24-25 \times 14-16 (ex icone), coloratis.

Hab. in Gallia in culturis *Oosporæ* crustaceæ, quacum vivit, et cujus, teste Beauverie, esset status ascophorus.

14. *Chætomium spirochæte* Palliser in North Am. Fl. III, pt. 1 (1910) 3697
p. 61. — Peritheciis plus minus dense gregariis, late ellipsoideis, 300 \times 225, tenuius, fragilibus, atro-brunneis, sæpe nigris, dense piligeris; pilis basalibus et lateralibus remote septatis, levibus, brunneis, flexuosis, 3 μ . cr., apicalibus numerosis, sæpe massam dense intricatam sphaeroideam, 800 μ . diam., formantibus, rectis usque ad 350 μ ., supra maxime flexuosis v. irregulariter pluries spirāliter tortis, atro-brunneis, basi 4-5 μ . cr., plus v. minus crasse incrustatis, apicem versus pallidioribus; ascis . . . ; sporidiis e subhyalino brunneis, late ovoideis, utrinque leviter apiculatis, 7-11 \times 6-9.

Hab. in charta uda putrescente, Ames Jowa Amer. bor. (L. H. PAMMEL).

15. *Chætomium flexuosum* Palliser, in North Amer. Fl. III, pt. 1 3698
(1910) p. 61. — Peritheciis sparsis v. gregariis, late ellipsoideis v. ovoideis, 300-400 \times 225-350, tenui-membranaceis, atro-brunneis v. nigris, ubique piligeris; pilis basalibus et lateralibus longis, tenuibus, flexuosis, pallide brunneis, apicalibus parcioribus, 500 \times 4-6, sursum sensim tenuatis, remote septatis, atro-brunneis, supra pallidioribus, asperulis, rectis, prope apicem vero semel v. bis laxè spirāliter convolutis; ascis . . . ; sporidiis brunneis late ovoideis v. subglobosis, utrinque subapiculatis, 9-11 \times 7-9.

Hab. in cistis vetustis, lignis et fructibus Hordei putrescentibus, New York, Michigan etc. Amer. bor.

16. *Chætomium aterrimum* Ell. et Ev., in Palliser North Am. Flora, 3699

III, pt. 1 (1910) p. 62. — Peritheciis sparsis, laxe adhaerentibus, nigris, ovoideis v. subglobosis, 275 μ . alt., apice perforatis, tenui-membranaceis, dense piligeris; pilis basalibus et lateralibus numerosis, levibus v. leviter incrustatis, flexuosis, læte brunneis, septatis, fragilibus; pilis apicalibus atro-brunneis, crasse incrustatis, basi 6 μ . cr. apice 10-12 μ . cr., usque ad 120-180 μ . rectis, sursum in spiram regularem, 400-500 μ . long. et 50-60 μ . diam., decies v. duodecies convolutis; ascis . . . ; sporidiis ellipsoideis, utrinque leviter apiculatis, flavo-brunneis, 6-7,5 \times 4-5.

Hab. in caryopsidibus Tritici putrescentibus, Rockport Kansas (E. BARTHOLOMEW).

17. *Chætomium cochlioides* Palliser, in North Am. Fl. III, pt. 1 3700 (1910) p. 61. — Peritheciis sparsis v. gregariis, late ovoideis vel globosis, 300-400 μ . diam., tenui-membranaceis, atro-brunneis, dense piligeris; pilis lateralibus et basalibus pallide brunneis, septatis, vix 4 μ . cr., sursum attenuatis, pilis apicalibus valde flexuosis a basi ipsa, sursum inæqualiter spiraliter curvis, levibus v. raro basi asperulis, copiosis, massam intricatam usque ad 700 μ . supra perithecium expansam formantibus; ascis . . . ; sporidiis e subhyalino pallide brunneis late ovoideis v. subglobosis, subinde polis subapiculatis, 9-11 \times 8-10.

Hab. in charta, fœno, cistis, storeis putrescentibus, udis, New Jersey, Louisiana etc. Amer. bor.

18. *Chætomium Elasticæ* Koord., Botan. Untersuch. (1907) pag. 185, 3701 fig. 16 I. — Peritheciis superficialibus, coriaceis, atris, ovoideis, papillato-ostiolatis, dense et longe villosis, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., sparsis v. gregariis, pilis 350-450 \times 3; ascis clavatis, apice rotundatis et haud incrassatis, 8-sporis, 45-50 \times 15-18, aparaphysatis; sporidiis continuis, fumigatis, ellipsoideis v. subglobosis, utrinque rotundatis v. obtusis v. subacutis, 10-12 \times 6-10.

Hab. in foliis putrescentibus ex Java, Martio 1907 (KOORDERS).

— *Chætomio Kunzeano* Zopf proximum.

19. *Chætomium papillosum* Cocconi, Mem. Ac. Sc. Bologna, ser. V, 3702 t. VIII (1902) p. 683, cum tabula. — Peritheciis laxe gregariis, minutis, subglobosis, superficialibus, vertice obtuso poro apertis, hyphis myceliis radiantibus, pallidis, exilibus basi cinctis, superne vero setulis fuligineis, patenter radiantibus, filiformibus, simplicibus, apice exquisite hamatis, laxiusculis perithecii diametrum superantibus ornatis; ascis crasse cylindræis, apice rotundatis, breviter tenuato-stipitatis, octosporis, aparaphysatis; sporidiis monostichis,

ovoideis, levibus, hyalinis, basi v. apice papilla conoidea, brevi, equidem hyalina auctis.

Hab. ad ligna putrida pr. Bononiam. — Teste auctore simul adsunt status conidiophorus (*Stachybotrys*?) et pycnidicus (*Diplodia*). Dimensiones omnes desiderantur! Ob sporidia hyalina vix hujus generis.

SORDARIA Ces. et De Not. — Syll. I p. 230, IX p. 487, XIV p. 492, XVI p. 430, XVII p. 601.

1. *Sordaria Lappæ* Potebnia, Myc. Stud. in Ann. Myc. V (1907) p. 13 8708 et Travaux Soc. Nat. de Kharkov, XXXXVIII (1907). — Peritheciis erumpentibus, piriformibus 450×200 , collo 120-150 \times 16; sporidiis ellipsoideis, nigris, $21 \times 14-15$.

Hab. in caulibus putrescentibus *Lappæ* majoris, socio *Helminthosporio brachyclado*, in Rossia media.

2. *Sordaria hirsuta* (Dang.) Sacc. et Trav. Syll. XX, pag. 807, Po- 8704 *dospora hirsuta* Dangeard in Botaniste X (1907) pag. 345, t. 81 (sine diagnosi). — Peritheciis semiimmersis, globoso-conoideis, brunneo-nigricantibus, collo longiusculo sæpe curvulo præditis, mycelio albo v. brunneo perithecia investiente et connectente, hyphis septatis, crassiuscule tunicatis; sporidiis initio cylindraceis hyalinis $15 \times 2-3$, dein ellipsoideis atro-brunneis $25-30 \times 14$, cauda hyalina 20 longa auctis.

Hab. in excrementis? ... sed culta tantum observata, in Gallia. — Præcipue indumento copioso albo-brunneo dignoscenda videtur.

HYPOCOPRA Fuck. — Syll. I p. 240, IX p. 490, XI p. 279, XVI p. 433, XVII p. 605.

1. *Hypocopra fimicola* (Rob.) Sacc. — Syll. I, p. 240. — var. *felina* 8705 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 341. — A typo vix recedit partibus omnibus paululo majoribus; peritheciis 250 μ . diam.; ascis 200×20 ; sporidiis $22-24 \times 14-16$.

Hab. ad stercus felineum putrescens, La Plata, Rep. Argentina Amer. austr.

2. *Hypocopra capturæ* (Speg.) Sacc. — Syll. I, p. 242. — var. *disco-* 8706 *papillata* Starb., in Arkiv för Bot. V (1905) pag. 15 (extr.). — A typo differt: ascis $200-250 \times 19-21$, sporidiis $25-30 \times 12-14$ nec non peritheciis late ostiolatis, ostiolo disciformi centro pertuso supra matricem elevato.

Hab. in fimo ovino, prov. Salta Argentina.

CAPROLEPA Fuck. — Syll. I p. 248, IX p. 498, XVI p. 434, XVII p. 608.

1. *Caprolepa equorum* Fuck. — Syll. I, pag. 249. — var. *leporina* 8707 Niessl ap. Rehm, Hedw. XXVIII (1889) p. 356. (*Hypocopra*). — Peritheciis glabris, basi hyphis brunneis, 2,5 μ . cr., septatis cinetis; ascis 180 \times 12-14, apice incrassatis rotundatisque, octosporis; sporidiis ellipsoideis, obtusis, crasse tunicatis, atro-brunneis, 18-24 \times 7-8, monostichis; paraphysibus filiformibus, 3 μ . cr.

Hab. in fimo leporino in silvis pr. Ratschitz Moraviæ. — Inter *C. equorum* et *C. merdariam* media.

PHÆOBOTRYOSPHERIA Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 120 (Etym. *phæos* fuscus et *Botryosphæria*). — Stromata pulvinata v. plus minus evoluta, erumpenti-superficialia; perithecia stromate inserta et plus minus infossa, atra, subcoriacea. Sporidia elliptico-rhombodea, continua, fuliginea, octona.

1. *Phæobotryosphæria Yerbæ* Speg., l. c. p. 120, cum icon. — Peri- 8708 theciis subsparis v. aggregatis et stromate plus v. minus evoluto connexis, globoso-lenticularibus, papillato-ostiolatis, coriacellularis, atris, albo-farctis, 200 μ . diam., contextu grosse et parum distincte parenchymatico, fuligineo; ascis clavatis, apice rotundatis, crassissimeque tunicatis, 150-180 \times 30-35, paraphysibus nullis v. parcis et spuriis obvallatis, brevissime noduloso-pedicellatis; sporidiis distichis, ellipsoideis, sæpius rhombodeo-navicularibus, utrinque obtusulis, 30-40 \times 14-20, eguttulatis, opace fuligineis, levibus.

Hab. ad ramulos emortuos Ilicis paraguariensis (Mate), Misiones Argentinae.

Sect. 4. Hyalodidymæ.

SPHÆRELLA Ces. et De Not. (*) — Syll. I p. 476, IX p. 611, XI p. 295, XIV p. 525, XVI p. 468, XVII p. 635.

(*) De præferendo nomine *Sphærella* loco *Mycosphærellæ* oſr. quæ diximus in BRIQUET *Rec. des docum. destinés à servir de base aux débats au Congr. internat. de Botan. de Bruxelles* (1910) p. 46. Nempe: *Sphærella* (Fr. 1849) Ces. et De Not. 1868 (species nunc ultra 700!) est nomen conservandum et e contra est rejicendum nomen *Mycosphærella* Johans., 1884 ex parte [non *Mycosphærella* Johans. emend. Sacc. 1891], nam gen. antierius *Sphærella* Somm., 1824, constat ex unica specie valida, sed mox mortua, quæ jam ab anno 1823 *Hæmatococcus* audit.

1. *Sphærella Alyssi* Hollós, Ann. Mus. Nat. Hungar. V (1907) p. 44. 3709
— Peritheciis gregariis, epidermide velatis, depresso-globosis, fuscois, punctiformibus, pertusis, 50-70 μ . diam., contextu parenchymatico; ascis ovoideis vel clavatis, breviter stipitatis, octosporis, 24-30 \times 9-10, paraphysatis; sporidiis 2-3-stichis, oblongis, medio 1-septatis, non constrictis, hyalinis, 9-10 \times 3-4.

Hab. in caulibus siccis *Alyssi* tortuosi prope Kecskemét, Hungariæ.

2. *Sphærella persica* (Syd.) Sacc. et Trott., *Mycosphærella persica* 3710 Syd., Ann. Mycol. VI (1908) p. 529. — Peritheciis sparsis v. irregulariter aggregatis, minutis, plerumque in partibus matricis cinereo-tinctis sitis, epidermide tectis, globosis, atris, nitidis, poro rotundo usque ad 30 μ . lato apertis, 70-140 μ . diam., contextu parenchymatico, brunneo, circa porum obscuriore; ascis ovoideis v. subcylindraceis, breviter stipitatis, 45-70 \times 17-25, octosporis; sporidiis distichis oblongis, medio 1-septatis, non constrictis, utrinque rotundatis, hyalinis, 14-21 \times 6-7, cellula super. subinde paullo latiore.

Hab. in caulibus emortuis *Morieræ stenoptera* in Monte Kuh Parrau Persiæ occid. (Th. STRAUSS).

3. *Sphærella andina* Speg., An. Mus. Nac. Buenos Aires t. XIX 3711 (1909) pag. 350. — Maculis nullis; peritheciis laxè gregariis primum epidermide velatis dein plus minusve denudatis, udis subglobosis 90-120 μ . diam. minute papillato-ostiolatis, submembranaceis; ascis crasse cylindraceis, 70-80 \times 20-24, paraphysatis octosporis; sporidiis ex ellipsoideo subclavulatis rectis, 18-20 \times 6, medio 1-septatis non v. vix constrictis, hyalinis (an postremo dilute fumosis?).

Hab. ad scapos aridos *Thlaspeos andicolæ* prope Lago Blanco, Patagonia Amer. austr. — Species cum *S. Cruciferarum* (Fr.) Sacc. non comparanda.

4. *Sphærella Theobromæ* F. C. v. Faber in Arbeit. K. Biol. Anst. 3712 Berlin VII (1909) p. 219. — Maculis pallidissime brunneis v. flavidis, margine succineo dein atro-brunneo, elevato cinctis; peritheciis innatis, nigris, dein ostiolo brevi nigro præditis; ascis clavatis, 8-sporis; sporidiis fuscoideis, 17 μ . long., continuis visis sed forte immaturis.

Hab. in fructibus, *Phytophthora* infectis et necatis, *Theobromæ Cacao*, Camerun Afric. trop. Forte species damnosa.

5. *Sphærella Boquilæ* Speg. Fungi Chilenses (1910) p. 53. — Macu- 3713

lis nullis; peritheciis hypophyllis, sparsis v. laxe gregariis, lenticularibus, minutis nigris, epidermide tectis, 90-100 μ . diam.; ascis sublanceolatis, apice crasse tunicatis, basi brevissime pedicellatis, 40 \approx 12, sporidiis conglobatis, subclavulatis, non v. vix inæquilateralibus, non constrictis, parvis, hyalinis, 12-13 \approx 3.

Hab. in foliis siccis Boquilæ trifoliatæ in silvis prope Cerro Carracol de Concepcion, Chile Amer. austr.

6. *Sphærella Lardizabalæ* Speg., Fungi Chilenses (1910) pag. 55. — 3714
Maculis nullis; peritheciis laxe gregariis innato-erumpentibus, nigris coriaceis, ostiolo minuto pertusis, 75-90 μ . diam.; ascis lanceolatis brevissime pedicellatis, aparaphysatis; sporidiis subconglobatis subclavulatis, hyalinis, parvulis, distichis v. tristichis, 10-12 \approx 2,5-3.

Hab. in foliis dejectis subputrescentibus Lardizabalæ bitermata, Cerro Caracol de Concepcion, Chile Amer. austr.

7. *Sphærella rhoïna* Sacc., Ann. Mycol. VI (1908) p. 561. — Macu- 3715
lis peculiaribus nullis, sed folio toto arescendo brunneo; peritheciis hinc inde densiuscule congregatis, punctiformibus, perexiguis, plerumque hypophyllis, hemisphæricis, prominulis, nitidulis poro minuto pertusis, 70-80 μ . diam.; ascis cylindræis, apice rotundatis, basi tenuato-subsessilibus, 30-36 \approx 5,5-6, octosporis, aparaphysatis, initio fasciculatis; sporidiis distichis tereti-fusoideis, utrinque obtusulis, 1-septatis, non v. vix constrictis, 7-8 \approx 2, hyalinis.

Hab. in foliis putrescentibus Rhois Toxicodendri, pr. Tamsel Germaniæ (P. VOGEL).

8. *Sphærella maculiformis* (Pers.) Auersw. — Syll. I, p. 477, var. Hip- 3716
pocastani Jaap in Abhandl. Bot. Ver. Brandenb. LII (1910) p. 141. — Præcipue dignoscitur sporidiis majoribus 12-17 \approx 3-3,5, tereti-clavulatis, supra medium septatis, distichis, ascis cylindræis 40 \approx 7.

Hab. in foliis Aesculi Hippocastani pr. Triglitz Borussiae. — *Septoria Aesculi* videtur ex auctore status pycnidicus.

9. *Sphærella Violæ* (A. Pot.) Sacc. et Trav., Syll. XX p. 829, *My-* 3717
cosphærella Violæ A. Potebnia, Ann. mycol. (1910) p. 51, f. 5:3. — Peritheciis 150-170 μ . diam., subimmersis, ostiolo verruciformi præditis; ascis 60-85 \approx 18-20; sporidiis 21 \approx 5-6, cylindræis, medio septatis.

Hab. in foliis hibernantibus Violæ hirtæ, Gouv. Kursk Rossia. — Hue pertinent verisimiliter, ut formæ metageneticæ: *Cercospora Violæ*, *Ramularia lactea*, *Septoria Violæ*.

10. *Sphærella silenicola* Hollós, Ann. Mus. Nat. Hungar. VII (1909) 3718 p. 51. — Peritheciis epidermide tectis, sparsis, sphæroideis, nigris, breve papillatis, 140-180 μ . diam., contextu celluloso; ascis fasciculatis, clavatis, estipitatis, vertice rotundatis et crasse tunicatis, 8-sporis, 48-60 \times 18-22, aparaphysatis; sporidiis 2-3-stichis, oblongo-ellipsoideis, medio 1-septatis non constrictis, 2-4 guttulatis, 20-22 \times 6-7.

Hab. in caulibus siccis *Silenes Otitis* prope Kecskemét Hungariæ.

11. *Sphærella gypsophilicola* Hollós, Ann. Mus. Nat. Hungar. V 3719 (1907) p. 44. — Peritheciis dense gregariis, epidermide velatis, globulosis, prominulis, nigris, punctiformibus, pertusis, 100-120 μ . diam., contextu parenchymatico; ascis ovoideis v. oblongis, sessilibus, octosporis, 36-40 \times 12-14, aparaphysatis; sporidiis oblongo-ellipsoideis, rectis curvulisve, medio 1-septatis, non constrictis, 4-guttulatis, hyalinis, 16-18 \times 4-5.

Hab. in caulibus siccis *Gypsophilæ paniculatæ* prope Kecskemét Hungariæ.

12. *Sphærella arenariicola* (Bubak) Sacc. et Trott., *Mycosphærella* 3720 *arenariicola* Bub. in Handel-Mazzetti, Bot. Reise Pont. Randgeb. in Ann. Naturhist. Hofmus. Wien XXIII (1909) p. 103. — Peritheciis hypophyllis, rarius epiphyllis, fere æqualiter sparsis, parum immersis, basi globosis, parte libera conica, aterrimis, opacis, contextu nigro-brunneo, 80-120 μ . latis; ascis oblongis 30-45 \times 9-11, saepe curvatis, crasse tunicatis, breve stipitatis, aparaphysatis, octosporis; sporidiis fusoideis 9-11 \times 2.5-3.5, in medio uni-septatis, utrinque attenuatis et rotundatis, hyalinis.

Hab. in foliis *Arenariæ rotundifoliæ*, in montibus ponticis Anatoliæ. — *Sph. Pulvisculæ* proxima.

13. *Sphærella Silenes-acaulis* Maire, Oesterr. Bot. Ztschr., LVII 3721 (1907) p. 335. — Peritheciis sparsis v. gregariis, primo immersis, dein erumpentibus, globosis, 130-180 μ . diam., nigris, levibus, ostiolo minuto vix papillato pertusis; ascis sessilibus, oblongo-cylindræcis, 35-43 \times 12-13, octosporis; sporidiis distichis, fusoideis, utrinque obtusis, medio septatis, non constrictis, levibus, hyalinis, 9-13 \times 2.5; paraphysibus nullis.

Hab. in pedunculis, calycibus, foliisque exsiccatis *Silenes acaulis*, Hühnerspiel Tirolie, alt. 2300 m. — Affinis *Sph. si-biricæ* et *S. subnivali*.

14. *Sphærella citrullina* C. O. Smith, Delaw. Exper. Stat. Bull. 70 3722

(1905), *Mycospharella citrullina* (C. O. Sm.) Grossenbacher, Techn. Bull. N. York Agric. Exp. Station n. 9 (1909) p. 226, t. I-VI. — Peritheciis globoso-depressis v. obconoideis, atro-brunneis vel nigris; rugulosis, pro more ostiolato-papillatis, simplicibus, dense sparsis, erumpentibus, denique subsuperficialibus, 100-165 μ . diam.; ascis cylindraceutis v. tereti-clavatis, aparaphysatis, subsessilibus, 45-58 \times 7-10; sporidiis plerumque monostichis, bicellularibus, hyalinis, oblongo-fusoideis, vel fusoides, modo non constrictis, modo cellulis, præcipue superiore, tumidulis et tunc constrictis, 10-12 \times 3,5-4.

Hab. in caulibus Cucumeris Melonis, C. sativi et probabiliter Citrulli vulgaris, quibus valde nocet in America boreali et in Italia (Turconi). — Status pycnidicus est *Diplodina citrullina*. — Fusiorem notitiam de specie et ejus synonymia videas apud Grossenbacher l. c.

15. *Sphærella Tamaricis* Hollós, Ann. Mus. Nat. Hung. IV (1906) 3723 p. 332. — Peritheciis epidermide tectis, gregariis, depresso-globosis, nigris, apice pertusis, 140-180 μ . diam.; ascis clavatis, estipitatis, 8-sporis, 70-80 \times 16-18 aparaphysatis; sporidiis oblique monostichis v. inordinate distichis, oblongis, medio 1-septatis, constrictis, utrinque rotundatis, initio hyalinis, dein flavidulis, 20-22 \times 10-12, loculo superiore plerumque paullo crassiore.

Hab. in ramulis siccis Tamaricis africanæ, Kecskemét Hungariæ.

16. *Sphærella viticola* Hollós, Ann. Mus. Nat. Hung. V (1907) p. 454. 3724 — Peritheciis subcutaneo-erumpentibus, gregariis v. sparsis, globulosis, nigris, 140-210 μ . diam., ostiolo punctiformi, contextu parenchymatico; ascis clavatis, breviter stipitatis, 6-8-sporis, 80-90 \times 18-24, aparaphysatis; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, leviter constrictis, initio hyalinis, dein flavidulis, pluriguttulatis, 26-28 \times 9-10 loculo superiore, paullo crassiore.

Hab. in sarmentis semivivis Vitis viniferæ prope Kecskemét Hungariæ. — A ceteris speciebus *Sphærellæ* in Vite vigentibus satis distincta.

17. *Sphærella Vogelii* Syd., Mycoth. germ. fasc. XIV-XV, n. 631 3725 (1908) et in Ann. Mycol. VI (1908) p. 480. — Peritheciis hypophyllis, dense sparsis v. gregariis, immersis, atris, membranaceis, subglobosis, 60-125 μ . diam.; ascis fasciculatis, aparaphysatis, clavatis, sessilibus vel brevissime stipitatis, apice rotundatis, 42-50 \times

9-11, octosporis; sporidiis distichis, oblongo-fusoides, circa medium septatis, subinde loculo superiore latiore sed brevior, tandem constrictis, hyalinis, $15-22 \approx 3-4 \frac{1}{2}$.

Hab. in foliis putrescentibus *Rhamni Catharticæ*, Tamsel, Marchia Brandenburg (P. VOGEL).

18. *Sphærella asunciensis* (Starb.) Sacc. et Trott., *Mycosphærella a.* 3726
sunciensis Starb. Ascomyc. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) pag. 21, fig. 15. — Peritheciis epiphyllis epidermidem utriusque paginæ paullum pustulatum elevantibus, ostiis rimosis prominentibus, aggregatis et maculas orbiculares vel varie determinatas, 2-3 mm. diam., obscuriores efformantibus, minutissimis, circa 150 μ . diam.; ascis aparthysatis, cylindræis v. cylindræo-obclavatis, vel fusiformibus, sessilibus, sursum incrassatis, $100-127 \approx 12,7-15$; sporidiis octonis, irregulariter monostichis vel nonnullis distichis, interdum inferioribus conglobatis, clavulatis, sursum obtusis, deorsum anguste v. fere caudatim attenuatis, cauda interdum paullum curvata, medio-septatis, endoplasmate grumoso vel guttulis quatuor ornatis, hyalinis, $29-33 \approx 6-7$.

Hab. in foliis vivis *Trichiliæ* sp. villa Morro, Asunción, Paraguay (MALME). — Pycnidia peritheciis similia adsunt: sporulis numerosissimis, bacillaribus, hyalinis, $6-8 \approx 1-2 \mu$. e basidiis filiformibus $19-25 \approx 1-2$ orientibus. — Inter *Sphærellas* sporidiis majoribus *S. elatiori* Sacc. affinis, maculis autem et peritheciis parasitantibus nec non sporidiis valde differt.

19. *Sphærella Molleriana* Thüm. - Syll. I, p. 491 — var. *megalospora* 3727
 Da Camara, Bol. Soc. Broteriana, XXV (1910) Extr. pag. 7. — Peritheciis sæpe sparsis, haud vel in macula fere nulla dispositis; ascis late obclavatis, hyalinis, subsessilibus, octosporis, $50-60 \approx 18-20$; sporidiis di-tristichis, claviformibus, hyalinis, medio septatis, non v. vix constrictis, utrinque guttulatis, $20-25 \approx 6-8$.

Hab. in foliis *Eucalypti* sp., prope Coimbra, Cerca de S. Bento, Lusitaniæ (A. MOLLER).

20. *Sphærella conspicua* Syd., Ann. Mycol. V (1907) pag. 356. — 3728
 Maculis amphigenis, valde conspicuis, orbicularibus vel suborbicularibus, conflundo sæpe irregularibus, $\frac{1}{2}-1$ cm. diam., bene limitatis, fusco-brunneis; peritheciis amphigenis plerumque dense aggregatis, punctiformibus, tenui-membranaceis, immersis, atris, globulosis, poro pertusis, $70-110 \mu$. diam.; ascis fasciculatis, clavatis, apice rotundatis, non incrassatis, basi attenuatis, aparthysatis, $50-72 \approx 11-14$, octosporis; sporidiis distichis, elongatis, utrinque

obtusiusculis, rectis v. leniter curvulis, medio 1-septatis, non constrictis, hyalinis vel chlorino-hyalinis, $24-28 \approx 3-3\frac{1}{2}$.

Hab. in foliis *Myrsines* spec., prov. Minas Geraes, Confins, Brasilia.

21. *Sphærella antivarensis* Bubák, Bull. Herbier. Boiss. 2 sér. VI 3729 (1906) p. 399. — Peritheciis sparsis v. hinc unde aggregatis, basi tantum insculptis, subsuperficialibus, globoso-depressis, nigris, $130-160 \mu$. diam., contextu atro-brunneo, inferne vere subhyalino; ascis ovoideo-clavatis, breviter stipitatis, $30-35 \approx 11-15$, paraphysatis; sporidiis oblongis, $11-13 \approx 4-4,5$, hyalinis, bicellularibus, cellula superiore latiore.

Hab. in ramulis adhuc vivis *Myrti* communis pr. Bar, Antivari, Montenegro.

22. *Sphærella Tormetillæ* (Sacc.) Trav. MS. — *Sph. Ariadna*, subsp. 3730 *Tormetillæ* (Sacc.) in Mich. I, p. 379 (1878). — Syll. I, p. 504. — Maculis irregulariter ellipsoideis, parvis, 2-3 mm. longis, pallide isabellinis, arescendo albicantibus, rufo-cinctis; peritheciis in quaque macula paucis, innato-erumpentibus, globoso-depressis, nigris, $50-60 \mu$. latis, poro angusto circulari pertusis; ascis late obovatis, basi acutatis, $22-25 \approx 14-15$; sporidiis imbricato-subtristichis, cylindraceo-fusoideis, utrinque obtusis, modice sed distincte curvulis, medio tenuiter septatis et parum constrictis, minute 4-guttulatis, hyalinis, $8-10 \approx 2\frac{1}{2}-3$.

Hab. in foliis languidis *Tormetillæ* erectæ, in silva «Montello», Treviso, Ital. bor. — Affinis *Sph. Ariadnæ* Sacc. sed sporidiis minoribus et præcipue matrice aliena distinguenda species.

23. *Sphærella Cydoniæ* Vogl., Ann. R. Acc. Agric. Torino XLVIII, 3731 1905, p. 16 (extr.); Atti R. Acc. Sc. Torino v. XLIII (1907-1908) p. 92 (246). — Maculis exaridis 2-5 mm. latis, subrotundis, epiphyllis, rarissime hypophyllis; peritheciis nigris (6-8-10), sparsis v. gregariis, immersis, inde epidermidem perforantibus, prominulis, sphæroideis, plus vel minus conoideo-attenuatis, ostiolo lato hiantibus, $100-120 \mu$. latis; ascis oblongo-v. ovoideo-clavatis, brevissime pedicellatis, medio irregulariter incrassatis, $60-70 \approx 12-14$; ascosporis ovoideo-ellipsoideis, v. fusoideis, leniter incurvatis, raro ad sepimentum leniter constrictis, loculis subæqualibus, chlorino-hyalinis, 20-22 (raro 20-26) $\approx 5-7$ (raro usque ad 8μ), 4-guttulatis.

Hab. in foliis siccis *Cydoniæ* vulgaris in Pedemontio Italiæ bor.

24. **Sphærella valeppensis** (Rehm) Sacc. et Trott., *Mycosphærella va-* 3732
leppensis Rehm, Oesterr. bot. Ztschr. LVI (1906) pag. 295. —
(Nomen nudum).

Hab. in foliis Dryadis octopetalæ in Valepp, Bavaria.

25. **Sphærella Acenæ** P. Henn., Deutsche Südpolar-Exped. VIII (1906) 3733
p. 9 (extr.). — Maculis irregularibus sparsis, fuscidulis; peritheciis epiphyllis innato-erumpentibus, sparsis vel gregariis, subglobosis v. lenticularibus, atro-fuscis, membranaceis, poro pertusis, 60-80 μ . diam.; ascis fasciculatis, clavatis, apice rotundatis, tunicatis, aparaphysatis, octosporis, 30-40 \times 8-10; sporidiis ellipsoideis v. subclavatis, obtusis, medio 1-septatis, hyalinis, subdistichis, 7-8 \times 3,5-4.

Hab. in foliis vivis Acenæ ascendentis, Kerguelen-Station in ins. Kerguelen (E. WERTH).

26. **Sphærella Oxyacanthæ** (Jaap) Sacc. et Trott., *Mycosphærella O-* 3734
xyacanthæ Jaap, Abh. Botan. Ver. Prov. Brandenb. IL (1907)
p. 15. — Peritheciis hypophyllis, gregariis laxiusculis, innatis, dein ostiolo erumpentibus, prominulis, globulosis, 100-140 μ . diam.; ascis tereti-fusoideis, sursum tenuato-rotundatis, fasciculatis, aparaphysatis 50-60 \times 9-12 (sæpius 10), octosporis, pedicello vix 4-5 μ . longo; sporidiis distichis, tereti-fusoideis v. clavulatis, leviter curvis, bicellularibus, 20-24 \times 4-5, eguttulatis, articulo super. paullo crassiore es sæpe brevior.

Hab. in foliis Cratægi Oxyacanthæ, socio st. conid.

Phleospora Oxyacanthæ, pr. Triglitz Borussiae.

27. **Sphærella Erythrinae** (Koord.) Sacc. et Trav. - Syll. XX, p. 820, 3735
Mycosphærella Erythrinae Koord., Botan. Untersuch. (1907) p. 189,
fig. 15 (7-14). — Peritheciis epiphyllis in maculis circularibus ascendendo albescentibus, sparsis, tectis, coriaceis, nigris, glabris, ostiolo papilliformi erumpente 50-60 μ . diam., ascis clavatis, apice valde incrassatis, fasciculatis, 8-sporis, 40-42 \times 10-12; sporidiis hyalinis, cylindræis, rectis v. curvulis, initio continuis, dein medio 1-septatis, utrinque rotundatis, 14-15 \times 3-3,5 sub 2-3-seriatis.

Hab. in foliis vivis Erythrinae ovalifoliae, prope Sadang prov. Kedu, Java (KOORDERS).

28. **Spaerella Onobrychidis** Hollós, Növényt. Közlemén., VI (1907) 3736
Extr. p. 2. — Peritheciis epidermide tectis, gregariis, depressoglobosis, nigris, apice pertusis, 100-160 μ . diam., contextu parenchymatico; ascis clavatis, estipitatis, 6-8-sporis, 60-80 \times 20-24, aparaphysatis; sporidiis inordinate distichis, oblongis, medio 1

septatis, constrictis, utrinque rotundatis, pluriguttulatis, hyalinis, 22-24 \times 8-9, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis *Onobrychidis sativæ*, prope Kecskmét Hungariæ.

29. *Sphærella Jaczewskii* (A. Pot.) Sacc. et Trav. - Syll. XX p. 822 3737

- *Mycosphærella Jaczewskii* A. Potebnia, Ann. mycol. (1910) p. 50, f. 2 et f. 5:2. — Peritheciis amphigenis, ampulliformibus, sub-superficialibus, nigris, ostiolo subverruciformi, 120-140 \times 150-170; ascis cæspitosis, basi v. medio inflatis, 55-70 \times 12-14; sporidiis sine ordine distributis, hinc inde congregatis circiter 21-23 \times 5-6 sed ætate variabilibus, ad septum non constrictis, loculo inferiori paullo angustiori.

Hab. in foliis hibernantibus *Caraganæ arborescentis* a *Pleospora Caraganæ* invasivis, Gouv. Kursk, Rossia. — Perithecia ex sclerotiis statui micropycnidico consociatis. Micropycnidii 70-100 μ . diam. sporulis bacillaribus 3 \times 0,5 (= *Phyllosticta Borsczowii* Thüm.?)

30. *Sphærella Lathyri* (A. Pot.) Sacc. et Trav. - Syll. XX, p. 823 - 3738

Mycosphærella Lathyri A. Potebnia, Ann. mycol. (1910) p. 51 f. 4. — Peritheciis 140-160 \times 120-140, erumpenti-subsuperficialibus, globoso-papillatis, ostiolo brevi verruciformi præditis et pertusis stromate rudimentali basi circumdatis; ascis clavatis breve stipitatis apice rotundatis, 60 \times 16; sporidiis hyalinis 16-17 \times 3,5, medio septatis, non constrictis, apice rotundatis, cellula sup. paullo latiori.

Hab. in foliis hibernatis *Lathyri pisiformis* pr. Kursk Rossia. — Sociæ adsunt *Phleospora Caraganæ* var. *Lathyri* et *Phyllosticta minussinensis* (?) quæ status ejusdem speciei habendæ sunt.

31. *Sphærella carinthiaca* (Jaap) Sacc. et Trott., *Mycosphærella ca-* 3739

rinthiaca Jaap, Ann. Mycol. VI (1908) p. 210. — Maculis sæpius internerviis, superne brunneis, inferne griseo-virentibus; peritheciis gregariis copiosis, hypophyllis, minutissimis, globosis, 40-90 μ . diam., poro rotundo 12-15 μ . diam. pertusis, atro-brunneis; ascis oblongis, dein cylindræis, apice rotundatis, fasciculatis, sessilibus, apophysatis, 34-40 \times 8-10, octosporis; sporidiis oblongo-fusoideis vel clavulatis, rectis v. curvulis, 10-14 \times 2,5-3, bicellularibus, ad septum medium non constrictis, hyalinis, di-tristichis.

Hab. parasitica in foliis vivis *Trifolii medii* pr. Obersee-land in Alpibus austriacis.

32. *Sphærella Magnusiana* (Jaap) Sacc. et Trott., *Mycosphærella Ma-* 3740
gnusiana Jaap, Ann. Mycol. VI (1908) p. 209. — Peritheciis gre-

garis, perexiguus, nigris, globosis, 80-100 μ . diam.; contextu parenchymatico atro-brunneo; ascis versiformibus, ellipsoideis v. clavulatis, sæpe quoque saccatis, sursum tenuatis, obtusulis v. rotundatis, 36-40 \times 12-20, octosporis, aparaphysatis; sporidiis irregulariter positis, oblongo-ovoideis v. breviter clavatis, utrinque rotundatis, 15-17 μ . long., bicellularibus, hyalinis, 2-4-guttatis, cellula sup. 6-7 μ . cr., inferiore 5-6 μ . cr.

Hab. in foliis vivis *Astragali alpini* pr. S. Ulrich et pr. Bad Ratzes in Alpibus austriacis.

33. *Sphærella Crotalariae* Petch, Ann. Roy. Bot. Gard. Peradeniya 3741 III (1906) Pt. I, p. 2. — Maculis latis, pallide brunneis zonatis; peritheciis gregariis, erumpentibus, atris 200 μ . diam.; ascis cylindraceis, octosporis, 42 \times 13; sporidiis distichis, fusoides, 1-septatis, hyalinis, 17-18 \times 4-5.

Hab. in foliis *Crotalariae striatæ* in ins. Ceylon. — Ad sunt pycnidia (*Phyllosticta Crotalariae* dicenda) erumpentia, peritheciis mixta, nigra, 90-130; sporulis ellipsoideis, continuis, hyalinis, 6-9 \times 2-3, in cirrum expulsis. Adest quoque st. conidiophorus (*Cercospora Crotalariae* dicenda): conidiis hyalinis rectis v. subcurvatis, multiseptatis, apice v. latere hypharum fasciculatarum minute papillatarum dispositis, in maculis brunneis.

34. *Sphærella cuprea* Sacc., Ann. Mycol. VII (1909) p. 432. — Ma- 3742 culis amphigenis, lateritio-cupreis, e circulari angulosis, 4-6 mm. diam., confluentibus, margine (præcipue in maculis epiphyllis) parum elevato, angustissimo nigricante cinctis; peritheciis dense gregariis, globosis v. globoso-lenticularibus, in epiphyllis evidentioribus et nitidulis, 80-120 μ . diam., poro centrali pertusis, nigricantibus; ascis fasciculatis oblongo-clavulatis, subsessilibus, apice obtusis, 35-50 \times 6, aparaphysatis, octosporis; sporidiis subdistichis, fusoides, utrinque obtusiusculis, 14-15 \times 2,5-2,7 medio 1-septatis, non constrictis, hyalinis, sæpe curvulis.

Hab. in foliis languidis *Ceratonie Siliquæ* in Horto botanico neapolitano (L. CUFINO). — A *Sphærella Ceratonie* Pass. videtur omnino diversa.

35. *Sphærella eryngiicola* Speg. Fungi Chilenses (1910) p. 53, cum 3743 icon. — Maculis nullis; peritheciis amphigenis immersis inter nervationes subseriatis, subconoideis, glabris, atris, membranaceis, 50-90 μ . diam.; ascis obclavulatis brevissime pedicellatis, 30 \times 5-6; sporidiis subclavulatis ad medium 1-septatis, non vel vix constrictis, hyalinis, 10 \times 2,5.

Hab. in foliis siccis subputrescentibus *Eryngii paniculati*, Cerro Caracol de Concepcion, Chile America austr. — A *Sph. Eryngii* (Wallr.) Cke. omnino diversa.

36. *Sphærella fœniculina* Speg., Fungi Chilenses (1910) pag. 54. — 3744
Maculis nullis; peritheciis confertiusculis, epidermide tectis, sub-
lenticularibus, 100-120 μ . diam., membranaceo-coriallaceis, glabris,
nigris, ostiolo minuto perforatis; ascis ovato-elongatis subsessilibus;
sporidiis conglobatis cylindraceo-subclavulatis 1-septatis non vel
vix constrictis, 18-20 \times 5-6, hyalinis.

Hab. in foliis Fœniculi piperiti in collibus circa Batuco Chile Amer. austr.

37. *Sphærella Fœniculi* Speg., An. Mus. Nac. Buenos Aires t. XIX 3745
(1909) p. 353. — Maculis nullis sed matrice tota sordidiuscule ci-
nerescente; peritheciis laxiuscule gregariis, epidermide velatis nu-
merosissimis, e lenticulari conoideis, 75-100 μ . diam., minute pa-
pillulato-ostiolatis, atris glabris coriallaceis; ascis cylindraceo-cla-
vulatis crasse tunicatis, 75-80 \times 16-18, aparaphysatis, octosporis;
sporidiis obovato-didymis, distichis, medio 1-septato-constrictis,
loculo supero subgloboso, infero conoideo nonnihil minore, hyali-
nis, 16-20 \times 9-10.

Hab. ad caules aridos putrescentes Fœniculi piperiti circa Santa Catalina, Buenos Aires Rep. Argentina, Amer. austr.

38. *Sphærella Bupleuri* Rota-Rossi, III Contr. Mic. Bergamo, Atti 3746
R. Ist. bot. Pavia ser. II, v. XIII p. 207 (extr. 1907). — Peri-
theciis gregariis, erumpentibus, globosis, atris, 135-200 μ diam.;
mycelio fusco, septato; ascis ovoideo-ellipsoideis, basi ventricosis,
octosporis 50-70 \times 20-22; sporidiis polystichis, oblongo-clavulatis,
medio 1-septatis et constrictis, 4-guttulatis, hyalinis, 18-22 \times 5-7.

Hab. in foliis siccis Bupleuri graminifolii, Pizzo Arera Bergamo Italiæ bor. (G. B. TRAVERSO).

39. *Sphærella Ægopodii* (A. Pot.) Sacc. et Trav. - Syll. XX, p. 817. - 3747
Mycosphærella Ægopodii Pot., Ann. Myc. 1910, p. 49, f. 1 et f. 5:1.
— Peritheciis subsuperficialibus; ascis fasciculatis, 50-60 \times 14, non-
nullis apicem versus angustatis et tunc longioribus; sporidiis me-
dio septatis, non constrictis, 18-19 \times 5, loculo inf. paullo angu-
stiori (4 μ .).

Hab. in foliis hibernatis Ægopodii Podagrariæ a *Septoria Podagrariæ* invasis, prov. Kursk Rossia: — *Phyllachora Podagrariæ* Lasch forte eadem species est. — Sec. Potebnia ut

pycnidia verisimiliter spectant: *Septoria Podagrariæ* et *Phyllosticta Ægopodii*.

40. **Sphærella Ferulæ** L. Maffei in Atti dell' Ist. botanico di Pavia, 3748 ser. II, vol. XI, p. 30 (extr. 1905) t. XXI, fig. 1-5 (ex err. sub nom. *Sph. caulicolæ*), et v. XIII, Micol. Ligustica, Extr. p. 5. — Peritheciis dense gregariis, globosis, primum epidermide tectis, deum ostiolo fere papillato pertusis; ascis cylindrico-clavatis, 160-180 × 21-25, aparaphysatis, octosporis; sporidiis monostichis, cylindraceo-ellipsoideis, obtusis v. acutiusculis 1-septatis, ad septum leniter constrictis, loculis inæqualibus, hyalinis, guttulatis, granulosis, 19-28 × 6-9.

Hab. in caulibus siccis *Ferulæ communis* in insula Gallinara Liguriæ, Ital. bor.

41. **Sphærella Cryptotæniæ** P. Henn., Engl. Jahrb. XXXVII (1905) 3749 p. 161. — Maculis sparsis, rotundatis, albidis, zona fusco-brunnea cinctis; peritheciis epiphyllis, minutissimis, atris, subhemisphæricis, pertusis, 60-70 μ . diam.; contextu atro-membranaceo; ascis fasciculatis, aparaphysatis, oblongo-ovoideis v. clavatis, obtusis, octosporis, 25-32 × 8-11; sporidiis distichis v. subtristichis, oblongis v. fuscoideis, obtusis, medio 1-septatis, hyalinis, 9-11 × 3.

Hab. in foliis *Cryptotæniæ japonicæ*, Wakayama Japoniæ (H. NAKASHIKI).

42. **Sphærella Escalloniæ** Spegazz., An. Mus. Nac. Buenos Aires 3750 t. XIX (1909) pag. 351. — Maculis orbicularibus, 1-5 mm. diam., superne albescentibus fusco-marginatis; peritheciis gregariis erumpentibus, sæpius epiphyllis e conoideo lenticularibus 100-120 μ . diam., atris, glabris membranaceis; ascis lanceolatis sessilibus, 50-60 × 14, octosporis; sporidiis di-tristichis rectis hyalinis, 16-18 × 3-4, loculis æquilongis, minute biguttuatis.

Hab. ad folia viva *Escalloniæ roseæ* in dumetis prope Nahuel-huapi, Rep. Argentina, Amer. austr.

43. **Sphærella Audibertiæ** Rehm, Ann. Mycol. VII (1909) p. 533. — 3751 Peritheciis caulem cinerascens late obtegentibus, gregariis, primitus sub epidermide nidulantibus, dein erumpentibus, globulosis, haud papillatis, nigris, glabris, c. 120 μ . diam.; ascis clavatis, obtusis 35 (an 85?) × 15-18, 8-sporis; sporidiis oblongis, utrinque obtusis, medio septatis, vix constrictis, utraque cellula biguttulata, hyalinis, 18 × 6; paraphysibus nullis.

Hab. ad caules *Audibertiæ polystachyæ*, Mounts prope Claremont California, Amer. bor. (C. F. BAKER).

44. *Sphærella Salviæ* Strasser, Verh. zool.-bot. Ges. Wien Bd. LVII 3752

(1907) p. 311. — Peritheciis amphigenis, late sparsis, subsuperficialibus, globosis, membranaceis, atro-brunneis, 40–60 μ . diam.; ostiolo impresso denique pertuso; contextu pseudoparenchymatico; ascis tereti-oblongis, 40 \approx 7–8; sporidiis fusoides-clavulatis; bicellularibus, 10–12 \approx 3–4, medio valde constrictis, loculo super. crassiore et brevior, infer. angustiore.

Hab. in foliis siccis *Salviæ glutinosæ* ad Sonntagberg Austriæ. — *Sphærellæ Carlinæ* proxima.

45. *Sphærella Lysimachiæ* v. Höhn. in Strasser, III Nacht. Pilz. 3753

Sonntagberges in Verhandl. zool. bot. Gesell. Wien, 1905, p. 605. — Peritheciis nigris nitidulis, crebro gregariis v. sparsis, globosis, prominentibus, 100 μ . diam.; ascis aparaphysatis, crasse clavatis, paucis, 30 \approx 8; sporidiis octonis, bicellularibus, 2–3-stichis, 8–14 \approx 3–4 (raro 16 \approx 4,5) utrinque obtusule tenuatis, medio leviter constrictis; cellula sup. crassiore.

Hab. in foliis siccis *Lysimachiæ vulgaris* ad Sonntagberg-Austriæ. (STRASSER).

46. *Sphærella midzurensis* (Bub.) Sacc. et Trott., *Mycosphærella mid-* 3754

zurensis Bubák et Ranojevic, Ann. Mycol. VIII (1910) p. 360. — Peritheciis sparsis, subepidermicis, dein erumpentibus, globosis, ostiolo papilliformi præditis, membranaceis, 200 μ . circ. diam., contextu obscure brunneo; ascis elongatis v. ovoideo-elongatis, basi in pedicellum longum crassum attenuatis, supra rotundatis, quandoque etiam angustatis, tunica crassa subgetatinosa præditis, 60–75 \approx 19–22; sporidiis plerumque ad basim asci congregatis (6), cæteris duobus supra v. regulariter inasco distributis, 19–22 \approx 5–6, elongatis v. fusoides, utrinque plerumque attenuatis, ibique rotundatis, pariete transversa præditis, non constrictis, hyalinis.

Hab. in caulibus siccis, foliis petiolisque *Androsaces carneæ*, M. Midzur, alt. 2168 m., Serbia.

47. *Sphærella Areticæ* (v. Höhn.) Sacc. et Trott., *Mycosphærella Areticæ* 3755

v. Höhn. in Fragm. Mykol., III, Sitzb. K. Akad. d. Wissensch. Wien Bd. CXVI Abt. I (1907) p. 110. — Peritheciis sparsis v. 2–3 approximatis, sæpius epiphyllis, globosis, indistincte papillatis, subcutaneis, demum semiemergentibus, nigris, nitidulis, 100–140 μ . diam.; contextu ex 4–5 stratis cellularibus atro-brunneis formato; ascis aparaphysatis, crassiuscule tunicatis, clavatis, brevissime noduloso-stipitatis, octosporis, 48–60 \approx 9–10; sporidiis distichis, ob-

longo-clavulatis, utrinque obtusulis, $14-19 \approx 4-5$, ad septum medium non constrictis, cellula superiore leniter crassiore.

Hab. in imis foliis morientibus Aretiae alpinæ ad Gurgl-Vent Tiroliae (Dr. GINZBERGER).

48. **Sphærella Ludwigiana** Sacc. et Har. in Sacc., Not. myc. VIII, 8756
Ann. Myc. v. IV (1906) pag. 490, tal. X, fig. 1. — Peritheciis laxe gregariis, perexiguis, punctiformibus, epidermide vix tumidula velatis, atris, depresso globosis $60-80 \mu$. diam., glabris, apice poro impresso, 8μ . diam. pertusis; contextu minute parenchymatico fuligineo, circa ostiolum saturatiore; ascis subglobosis v. globoso-ellipsoideis, utrinque rotundatis, subsessilibus, 15μ . diam. v. $18-20 \approx 13-14$, octosporis, aparaphysatis; sporidiis 3-4-sticho-conglobatis, oblongis, utrinque rotundatis, medio 1-septatis, non vel vix constrictis, $10-12 \approx 3$, hyalinis.

Hab. in caulibus emortuis Globulariæ vulgaris, Lardy Galliae, 1906 (LUDWIG, comm. P. HARIOT). — Affinis *Sphærellæ Ariadnæ* et *Sph. minori* quæ tamen satis diversæ.

49. **Sphærella Columbi** (Rehm) Sacc. et Trott., *Mycosphærella Co-* 3757
lumbi Rehm, Ann. Mycolog. VI (1908) pag. 120; Ascom. Exsicc. fasc. 41, n. 1764. — Maculis orbicularibus, fuscis, concentrice zonatis, 5 mm. diam., epiphyllis, minus distincte hypophyllis; peritheciis gregariis, innatis, erumpentibus, globulosis, atris, glabris, $70-90 \mu$. diam., poro pertusis, basi hyphis fuscidulis, $4-5 \mu$. cr. in contextum parenchymaticum peritheciolorum abeuntibus obsessis; ascis obovatis, $25-27 \approx 12$, octosporis; sporidiis clavulatis, utrinque obtusis, medio subconstricto-septatis, grosse 4-guttatis, hyalinis, $12-14 \approx 4-4,5$ distichis; paraphysibus nullis.

Hab. ad folia viva Plantaginis Rugelii, Columbus, Ohio Amer. bor. — A ceteris speciebus plantaginicolis satis distincta.

50. **Sphærella perexigua** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 3758
Arkiv. f. Bot. Bd. V (1905) pag. 21, fig. 16. — Peritheciis numerosissimis, caules totos nebulosim ambientibus, sparsim gregariis, interdum confertis, immersis vix prominulis globuloso-lenticularibus, poro minuto pertusis, contextu membranaceo, cellulis pro ratione magnis, polyedricis composito, nigricantibus, minutissimis, $75-100 \mu$. diam.; ascis octosporis, late obclavatis, sursum detrun-cato-obtusis, late sessilibus, $30-33 \approx 7,5-9$; sporidiis conglobatis vel superioribus distichis, primo intra ascos quadriguttulatis deinde medio septatis, clavulatis, hyalinis, $12,5-13 \approx 3,5 \mu$.; paraphysibus nullis.

Hab. in caulibus *Compositarum* speciei, Tarija Boliviae. —

M. alienæ Passer. affinis videtur, sed forma ascorum sporidiorumque differt; cfr. etiam *M. ambigua* Fautr. et Lamb.

51. *Sphærella Bakeri* (Rehm) Sacc. et Trott., *Mycosphærella Bakeri* 3759

Rehm, Ann. Mycol. VII (1909) p. 533. — Peritheciis gregariis, conoideis, minutissime papillulatis, atris, glabris, primitus innatis, dein prominentibus, c. 200 μ . diam.; ascis piriformibus, lata basi sessilibus, 8-sporis, 50 \times 18; sporidiis oblongis, subconoideis, utrinque subacutatis, medio paullulum constrictis, utraque cellula apice guttulata, hyalinis, 18 \times 6; paraphysibus nullis.

Hab. ad caules *Gnaphalii* emortuos, Mounts prope Claremont Californiæ (C. F. BAKER).

52. *Sphærella Serratulæ* Hollós, Ann. Mus. Nat. Hung. VI (1908) 3760

VI, p. 528. — Peritheciis epidermide velatis, gregariis, globulosis, nigris, 100-120 μ . diam., poro pertusis, contextu parenchymatico; ascis clavatis, estipitatis, 6-8 sporis, 30-35 \times 8-10, aparaphysatis, sporidiis inordinate distichis, oblongis, utrinque leviter attenuatis et rotundatis, medio septatis, vix constrictis, hyalinis, 12-14 \times 3,5-4, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis *Serratulæ tinctoriæ*, prope Keskemét Hungariæ.

53. *Sphærella Aronici* (Volkart) Sacc. et Trav., *Mycosphærella Aro-* 3761

nici Volk. in Ber. deut. bot. Gesell. XXI, pag. 480, tab. 25, fig. 4-6 (1903), *Sphærella? Aronici* Fuck. — Syll. I, pag. 538 [status metagenetici, non st. ascophorus]. — Peritheciis in maculis amphigenis variæ magnitudinis, viridi-atris, subvelutinis insidentibus, plerumque epiphyllis, immersis, globosis, atris, 140-160 μ . diam., poro circulari pertusis, excipulo crasso pseudoparenchymatico; ascis clavatis v. ellipsoideo-ventricosis, subsessilibus, paucis, 50-80 \times 25-40; sporidiis subtristichis, ellipsoideo-cylindræis v. subovoideis, utrinque obtusis, prope medium septatis, non constrictis, eguttulatis, loculo superiore interdum crassiusculo, hyalinis vel dilutissime luteolis, 30-40 \times 9-10. Status conidicus: *Fusicladium Aronici* (Fuck.) Sacc. — Syll. IV, p. 347; st. pycnidicus: *Phyllosticta Aronici* (Fuck.) Sacc. — Syll. III, p. 45.

Hab. in foliis languidis *Doronicorum*, præcipue *Doronici* (Aronici) scorpioidis et *Clusii* in Germania, Austria, Helvetia, Italia.

54. *Sphærella mutisiicola* Spegazz., Fungi Paul., Rev. Mus. La Plata 3762

t. XV (1908) p. 20. — Maculis epiphyllis sparsis repandis, 2-10 mm.,

cinerescentibus subcallosis subdefinitis; peritheciis centro macularum solitariis v. pauci-gregariis erumpentibus lenticularibus, 80-90, μ . diam., minute ostiolatis, glaberrimis, coriacellis, atris, contextu minute denseque parenchymatico subindistincto, atro-fuligineo; ascis aparaphysatis, antice obtuse rotundatis crasseque tunicatis, postice rotundato-cuneatis, minute stipitatis 50-60 \times 10-14, octosporis; sporidiis oblique distichis v. polystichis, clavulatis, retis v. leniter curvulis, parum supra medium septatis, loculo supero elliptico ovato, infero, cylindrico-conoideo, acutiore, 18-20 \times 4, hyalinis.

Hab. ad folia languida Mutisiæ sp. cuiusdam prope Sao Paulo, Brasilia (USTEBI).

55. **Sphærella Balsamorrhizæ** (Earle) Sacc. et Trott., *Mycosphærella* 3763
Balsamorrhizæ Earle, Bull. of the New York Bot. Gard. (1904) p. 292. — Peritheciis per latas areas densiuscule sparsis innatis, nigris lenticularibus, non collapsis, 200-225 μ . diam., contextu laxiuscule celluloso, cellulis 10-12 μ . diam., ostiolo minuto, perforato; ascis anguste ellipsoideis, breviter stipitatis, 60-70 \times 14, aparaphysatis; sporidiis distichis anguste ovoideis, inæqualiter 1-septatis, leviter constrictis, 18-20 \times 7-8.

Hab. in caulibus emortuis Balsamorrhizæ sp., King' Canon, pr. Carson Nevada Amer. bor. (C. F. BAKER).

56. **Sphærella Perezii** Speg., An. Mus. Nac. Buenos Aires t. XIX 3764
 (1909) p. 354. — Maculis nullis, matrice arescente fragili sordide cineresciente; peritheciis laxè gregariis coriacellis, parenchymate innatis, epidermide tectis adnatisque sæpius epiphyllis lenticulari-hemisphæricis, 100-120 μ . diam., minute umbilicato-ostiolatis; ascis, subcylindræis apice crasse tunicatis, aparaphysatis octosporis, 55-65 \times 10-12; sporidiis elliptico-didymis, medio modice 1-septato-constrictulis, 14-15 \times 5, hyalinis.

Hab. ad folia arida putrescentia Perezii patagonicæ in aridis secus Rio Santa Cruz Rep. Argent. Amer. austr.

57. **Sphærella Proustii** Speg., An. Mus. Nac. Buenos Aires t. XIX 3765
 (1909) p. 353 cum icon. — Maculis nullis sed matrice tota cinerescenti-arescente; peritheciis parenchymate innatis confertis, udis subhemisphæricis 100-120 μ . diam., siccis minute ostiolato-perforatis, membranaceis; ascis subclavatis 60-70 \times 11-12, octosporis aparaphysatis; sporidiis subacicularibus subcurvulis, 1-septatis ad septum non constrictis, 32-38 \times 3-4, hyalinis.

Hab. vulgata ad folia dejecta arida Proustii ilicifoliæ in

præandinis Cacheuta, prope Mendoza Rep. Argentina Amer. austr.

— An potius *Ophiosphærellæ* species?

58. *Sphærella leptosperma* Speg., Fungi Chilenses (1910) p. 55. — 3766

Maculis nullis; peritheciis epiphyllis erumpenti-subsuperficialibus sparsis v. laxe gregariis, nigris, glabris, subhemisphæricis, coriaccellis, ostiolo minuto perforatis, 90-100 μ . diam.; ascis subellipsoideis breviter cuneato-pedicellatis, 35-38 \times 10; sporidiis conglobatis cylindraceo-fusoideis, hyalinis, medio 1-septatis, non constrictis, 18-20 \times 3.

Hab. in foliis dejectis subputrescentibus *Proustia* pirifoliæ, Cerro Caracol de Concepcion, Chile Amer. austr. — *Sphær.* *Proustia* Speg. affinis sed differt ascis sporidiisque minoribus.

59. *Sphærella Fraxini* Niessl in Linhart, Fungi hungar. n. 162 (1883); 3767

Winter, Pilze, II, pag. 385. — Peritheciis hypophyllis, nigris, cæspitosis vel dense confertis, maculas griseas effusas formantibus, minutis, globosis, ostiolo punctiformi; ascis clavato-oblongis, subsessilibus, octosporis, 55-70 \times 10-13; sporidiis confertis, lanceolato-fusiformibus, rectis vel curvatis, utrinque obtusis, uniseptatis et parum constrictis, subhyalinis, 26-28 \times 4.

Hab. in foliis dejectis *Fraxini* excelsioris, Markt-Au prope Ung.-Altenburg (LINHART) et Riva Valsesia (CARESTIA).

60. *Sphærella Tupæ* Speg., Fungi Chilenses (1910) p. 58. — Macu- 3768

lis nullis; peritheciis sparsis v. laxe gregariis minute erumpentibus, pusillis, atris glabris, ostiolo minute perforatis, 80-90 μ . diam.; ascis obclavulatis subsessilibus, 35-40 \times 8, aparaphysatis; sporidiis distichis, hyalinis, clavulatis, parvis, 1-septato-constrictulis, 9-10 \times 2,5.

Hab. in ramis emortuis *Lobelia* salicifoliæ, Cerro Alegre de Valparaiso Chile Amer. austr.

61. *Sphærella Pantacanthæ* Spegazz., An. Mus. Nac. Buenos Aires 3769

t. XIX (1909) p. 354. — Foliis infectis totis sordide fusco-cinereiscentibus aridis fragilibus; peritheciis lenticularibus 70-90 μ . diam. parenchymate innatis, epidermide tectis, ostiolo lato pertusis; ascis e cylindraceo subclavulatis, aparaphysatis octosporis 40-50 \times 6-7; sporidiis e cylindraceo fusoideis distichis, 1-septatis non constrictis, 10-12 \times 2-2,5, loculis æquilongis, infero sæpius acutiore, rectis, hyalinis.

Hab. frequens ad folia arida *Pantacanthæ* Ameghinoi in aridis Chubut, Patagonia, Amer. austr.

62. *Sphærella Tabaci* Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 3770

p. 142 t. XX f. 8-10. — Peritheciis conoideo-globosis, basi applanatis, ostiolo prominulo præditis, 125-150 \times 100-120; ascis cylindricis, apice rotundatis, basi breviter pedicellatis, octosporis, aparaphysatis, 50-67 \times 10-13,5; sporidiis oblique monostichis, ovoideis, 1-septatis, ad septum leniter constrictis, primum hyalinis demum dilutissime griseis, 14-16,5 \times 6,5-7,5, loculo sup. latiore.

Hab. in caulibus *Nicotianæ Tabaci*, Razac, Dordogne Gallia. — Affinis *Sph. Nicotianæ*.

63. **Sphærella Asperifolii** B. R. S. in Saccardo, Not. Myc. VI, Ann. 3771

Myc. v. VI (1905) p. 508. — Peritheciis globulosis, epiphyllis, innato-prominulis, nigris, minutissimis, dense approximatis, levibus, 50-75 μ . diam., poro latiusculo pertusis; ascis clavato-oblongis, sessilibus, rosulatis, aparaphysatis, 28-30 \times 5-6; sporidiis distichis, fusoides, curvulis, medio 1-septatis, non v. vix constrictis, utrinque acutiusculis, 8-9 \times 2-2,5 hyalinis.

Hab. in foliis mortuis *Cynoglossi*, La Panne pr. Furnes Belgii (M. ROUSSEAU). — Forte initio in foliis nondum emortuis maculas generat.

64. **Sphærella viburnicola** Speg., An. Mus. Nac. Buenos Aires t. XIX, 3772

(1909) p. 356. — Maculis nullis sed matrice tota arescente atque sordide cinerescente; peritheciis hinc inde 5-30 gregariis sed non constipatis, prominulis sed epidermide velatis, e lenticulari conoideis, 80-100 μ . diam., ostiolo minutissimo umbilicato perforatis, glabris, atris, membranaceis; ascis cylindraceis, aparaphysatis, octosporis, 40-45 \times 7-8; sporidiis subclavulato-didymis, distichis, 1-septatis, hyalinis loculis subæquilongis, 10-2,5-3.

Hab. ad folia dejecta putrescentia *Viburni Tini* in hortis Santa Catalina, Argentina Amer. austr. — A *Sphær. Lantane* (Nits.) Auersw. ascis cylindraceis sporisque crassioribus distincta videtur.

65. **Sphærella Weigelæ** (Fairm.) Sacc. et Trott., *Mycosphærellæ* Fairm. 3773

Ann. mycol. (1910) p. 326. — Peritheciis minutis, gregariis, atris, hypophyllis; ascis cylindraceis, apice rotundatis, breve stipitatis (8-sporis?); sporidiis subdistichis, oblongo-fusiformibus, primo 2-guttulatis, dein uniseptatis, hyalinis, 10-13 \times 2-3.

Hab. ad folia dejecta *Weigelæ roseæ* cultæ Lyndonville N. Y. Amer. bor.

66. **Sphærella Molluginis** Rehm, Ann. Mycol. VII (1909) pag. 527, 3774

Ascom. exsicc., fasc. 45, n. 1861. — Peritheciis dispersis, rarius gregariis, innatis, globoso-conoideis, glabris membranaceo-contextis,

0,15 mm. diam., nigris, papillula minutissima demum per peridermium haud maculatum prominente; ascis subcylindraceis, brevissime stipitatis, $65 \approx 10$, 8-sporis; sporidiis fusiformibus utrinque acutatis, medio septatis et subconstrictis, utrinque cellula biguttata, hyalinis, $12-18 \approx 4-5$, distichis; paraphysibus nullis.

Hab. ad caules siccos Galii Molluginis, Hinterstein Alpium Algoviæ (Dr. REHM).

67. *Sphærella ricinicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3775 (1909) p. 355. — Peritheciis parvulis lenticulari-convexulis 90-120 μ . diam., subepidermicis, hinc inde confertiusculis, tenui-membraceis, ostiolo latiusculo umbilicato perforatis; ascis obclavulatis $50 \approx 8-10$, aparaphysatis octosporis; sporidiis e fuscoideo suclavulatis e disticho conglobatis, rectis, loculis subæquilongis, biguttulatis, hyalinis, $15 \approx 5$.

Hab. ad ramos aridos dejectos suoputrescentes Ricini communis, La Plata, Argentina Amer. austr.

68. *Sphærella pachythecia* Speg., Fungi Chilenses (1910) p. 56. — 3776 Maculis amphigenis, orbicularibus determinatis, ad hypophyllum fuscis ad epiphyllum arescenti-cinereis, areola denticulata atro-fusca cinctis; peritheciis epiphyllis, centro cinereo macularum subepidermide gregariis, pusillis, hémisphæricis, nigris, glabris, membranaceo-perenchymaticis, ostiolo minuto perforatis, 75-100 μ . diam.; ascis ovatis v. obovatis brevissime crasseque pedicellatis, $25-30 \approx 9-10$; sporidiis oblanceolatis, parvis, hyalinis, 1-septatis, non constrictis.

Hab. in foliis languidis v. siccis Cryptocaryæ Peumus, Cerro Caracol de Concepcion, Chile Amer. austr.

69. *Sphærella chenopodiicola* Speg., An. Mus. Nac. Buenos Aires 3777 t. XIX (1909) p. 351. — Maculis nullis vel parum manifestis; peritheciis pusillis lenticularibus laxè gregariis udis hémisphæricis 75-90 μ . diam., nigris, glabris membranaceis, ostiolo majusculo umbilicato perforatis; ascis subclavulatis breviter cuneato-pedicellatis, octosporis, aparaphysatis, $40-45 \approx 8-10$; sporidiis ellipsoideo-didymis septo constrictis, loculis æquilongis minute biguttulatis hyalinis, $11-13 \approx 3-3,5$.

Hab. ad caules aridos putrescentes Chenopodii hircini Ensenada, prope La Plata, Argentina America austr.

70. *Sphærella Woronowii* (Jacz.) Sacc. et Trott., *Mycosphærella Woronowii* Jacz. in Woronow, Contrib. ad Mycofloram Caucasi, Tiflis (1910) pag. 143. — Maculis rotundatis v. angulatis, ochraceis, fu-

sco-cinctis; peritheciis minutis nigris, prominentibus, epiphyllis, ostiolo minuto conico; ascis clavatis 60-80-100 \approx 12; paraphysibus nullis; sporidiis hyalinis, bicellularibus, curvatis v. rectis, constrictis, 17-20 \approx 4-6.

Hab. in foliis languescens Juglandis regiæ in Abchazia, Caucasus (G. WORONOW).

71. **Sphærella Ficus** Trav. et Spessa, Bol. Soc. Broter. vol. XXV 3779

(1910) pag. 170, t. I, f. 2. — Peritheciis hypophyllis, hinc inde dense gregariis, per epidermidem erumpentibus, sphæroideis, atris 70-90 μ . diam., poro angusto præditis; contextu subcarbonaceo, fuligineo-atro; ascis clavato-fusoideis vel subcylindræis, apapophysatis, octosporis, 45-50 \approx 6-8; sporidiis subdistichis, fusoideis, utrinque acutiusculis, medio septatis et ad septum non constrictis, 10-12 \approx 2 $\frac{1}{2}$ -3, hyalinis.

Hab. in pagina inferiore foliorum *Ficus macrophyllæ* in Horto botanico conimbricensi (A. MOLLER). — A *Sph. sycophila* Wint. peritheciis gregariis et fere maculas efformantibus, ascis multo majoribus et sporidiis typice subdistichis, rectis, acutiusculis differt.

72. **Sphærella Elasticæ** (Koord.) Sacc. et Trav. — Syll. XX, p. 820, 3780

Mycosphærella Elasticæ Koord., Botan. Untersuch. (1907) p. 189, fig. 16, II. — Maculis nullis; peritheciis innatis, crustaceis, glabris, nigris, globosis, gregariis, 50-60 μ . diam., amphigenis, ostiolo papilliformi erumpente; ascis cylindræis, fasciculatis, 40-45 \approx 4-4,5, apice obtusis; sporidiis hyalinis, clavato-cylindræis, basi angustatis, apice truncatis, basi obtusis, medio 1-septatis, 7-9 \approx 2-2,5 subdistichis.

Hab. in foliis putrescentibus *Fici elasticæ* prope Loano, Purworedio etc. prov. Kedu ins. Java (KOORDERS).

73. **Sphærella Nothofagi** Speg. An. Mus. Nac. Buenos Aires, t. XIX 3781

(1909) p. 352. — Maculis nullis vel quandoque matrice tota are-scenti-albicante; peritheciis sæpius 20-30 laxissime aggregatis, primo epidermide tectis dein plus minusve exertis, udis subhemisphæricis 90-110 μ . diam., siccis cupulato-collapsis, ostiolo vix papillato perforatis; ascis obclavatulis, 30 \approx 8, apapophysatis, octosporis; sporidiis subdistichis utrinque obtusiusculis, cylindræo-ellipsoideis, non v. vix constrictis, 8-10 \approx 2,5-3, loculis æquilongis, minute biguttulatis hyalinis.

Hab. ad folia emortua *Nothofagi obliquæ* et *N. pro-*

ceræ prope lago Nahuel-huapi, Argentina America austr. — A
S. antarctica Speg. toto cœlo diversa.

74. *Sphærella salicicola* (Fr.) Fuck. — Syll. I, p. 487 — f. *Amygdalina* Jaap in Abhandl. Bot. Ver. Brandenb. XLVII (1905) p. 85. 3782
 — Peritheciis gregariis, hypophyllis, globoso-lenticularibus, nigris, 100 μ . diam., ostiolo 15 μ . diam.; ascis tereti-clavatis, 38 \times 5,5, octosporis; sporidiis ovato-oblongis, 9-11 \times 3, bicellularibus, vix constrictis, distichis.

Hab. in foliis *Salicis amygdalinæ*, Prignitz Borussiae — Status conidicus videtur *Ramularia rosea* (Fuck.) Sacc.

75. *Sphærella baldensis* C. Mass. ap. Sacc. in Ann. Mycolog. 1911, p. 250. 3783
 — Peritheciis tenui-carbonaceis, erumpentibus, globulosis, hypophyllis, 70-80 μ . diam., in maculis vix distinctis suborbicularibus 1 mm. latis dense confertis, rarius subsparsis; ascis clavulatis breviter stipitatis, 25-32 \times 5-6; sporidiis oblongis, 1-septatis, hyalinis, 5-6 \times 2-2,5.

Hab. in foliis languidis *Salicis arbusculæ* in M. Baldo loco « Telegrafo » dicto. Legit doct. A. FORTI. — *Sphærellæ salicicolæ* Fuck. proxima.

76. *Sphærella grandispora* (Bub.) Sacc. et Trav. - Syll. XX p. 822, 3784
Mycosphærella grandispora Bub. in Handel-Mazzetti Bot., Reis. Pont. Randgeb. in Ann. Naturhist.-Hofmus. Wien, XXIII (1909) p. 103, t. V, fig. 2 a-e. — Peritheciis sparsis v. hinc inde gregariis, subepidermicis, globosis, dein superiore parte conica erumpentibus, atris, 45-60 μ . diam., crasse tunicatis, contextu dense parenchymatico, castaneo-brunneo; ascis tantum 3-4 in perithecio evolutis, ovoideis v. ellipsoideis, 33-44 \times 22-29, apice valde-incrasatis, octosporis; sporidiis cylindraceis 22-26 \times 6,5, rectis v. curvatis, in medio septatis, ibidem constrictis, utrinque attenuato-rotundatis hyalinis.

Hab. ad folia *Narthecei Balansæ*, in montibus ponticis Anatoliæ.

77. *Sphærella Puyæ* Speg., Fungi Chilenses (1910) p. 57, cum icon. 3785
 — Maculis nullis; peritheciis amphigenis, epidermide tectis, subseriatis pusillis atris, glabris, tenui-membranaceis, laxe parenchymaticis, 50-75 μ . diam., ostiolo latiusculo, usque ad 10 μ ., perforatis; ascis paucis ovatis v. obovatis brevissime crasseque pedicellatis, 20-25 \times 6-10; sporidiis subconglobatis e fusoides subclavulatis, 1-septatis non v. vix constrictis, 10-12 \times 2,5-3.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. Austr.

78. *Sphærella montenegrina* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3786 p. 400. — Peritheciis in areis foliorum atratis insertis, plerumque ad apices, sparsis v. gregariis, nigris, globosis, 90-140 μ . diam., tectis dein papilla conica brevi erumpentibus, demum depresso ampulliformibus, contextu atro crassiuscule parenchymatico; ascis ovoideo-clavatis, basi abrupte in stipitem brevem productis, apice incrassatis, 50-66 \times 16-22, octosporis; sporidiis inordinatis, oblongo-ellipsoideis, 17-22 \times 4,5-6, bicellularibus, hyalinis, utrinque obtusule tenuatis.

Hab. in foliis emortuis Asphodelinæ luteæ pr. Kosciele Montenegro.

79. *Sphærella Smilacis* Speg., An. Mus. Nac. Buenos Aires t. XIX 3787 (1909) p. 355. — Maculis sæpius marginalibus elongato-repandulis determinatis anguste subviolaceo-marginatis; peritheciis innatis epidermide velatis lenticularibus 90-110, sæpius epiphyllis, minute ostiolato-impressis, coriacellis; ascis subcylindraceis, aparaphysatis octosporis, 45-50 \times 10; sporidiis distichis medio septatis constrictulis, loculis subæqualibus, minute biguttulatis hyalinis, 18 \times 6.

Hab. ad folia languida *Smilacis campestris* in silvis secus Rio San Francisco, Jujuy Rep. Argentina Amer. austr.

80. *Sphærella Lapageriæ* Speg., Fungi Chilenses (1910) pag. 54. — 3788 Maculis nullis; peritheciis innato-erumpentibus laxè gregariis subglobosis, minutis coriacellis, 75-100 μ . diam., ostiolo impresso perforatis; ascis subcylindraceis deorsum cuneatis breviter noduloseque pedicellatis, 50 \times 10, aparaphysatis; sporidiis e cylindraceo subfusoides mediocribus sæpius leniter inæquilateralibus, ad septum medium non constrictis, 15-20 \times 3.

Hab. in foliis siccis *Lapageriæ roseæ*, Cerro Caracol de Concepcion Chile Amer. austr.

81. *Sphærella Alstræmeriæ* Speg., Fungi Chilenses (1910) pag. 52, 3789 (cum icon. p. 200). — Maculis fuscescentibus ellipticis indeterminatis; peritheciis laxè gregariis, lenticularibus minutis epidermide tectis membranaceis, 100-120 μ . diam.; ascis ovatis apice crasse tunicatis basi rotundatis sessilibus v. subsessilibus, 30-35 \times 16-20; sporidiis conglobatis, subcylindraceis, parvis, loculis æquilongis biguttulatis, 14-15 \times 4-5.

Hab. in pedunculis floralibus siccis *Alstræmeriæ* sp., Cerro Alegre de Valparaiso Amer. austr.

82. *Sphærella Wagneræ* (Earle) Sacc. et Trott., *Mycosphærella* Wa- 3790
generæ Earle, Bull. of the New York Bot. Gard. (1904) p. 292.

— Peritheciis per areas latas dealbatas densiuscule sparsis, minutis, nigris, prominulis, non collabentibus, 100-150 μ . diam., ostiolo inconspicuo; ascis ellipsoideis v. sæpius irregulariter fusoides, 60-70 \times 20, aparaphysatis; sporidiis inordinatis, ellipsoideis, utrinque obtusis, 1-septatis, 16-18 \times 6-7, hyalinis.

Hab. in caule emortuo *Wagneræ* sp. King' Canon pr. Carson, Nevada Amer. bor. (C. F. BAKER).

83. *Sphærella Galtoniæ* Hollós, Ann. Mus. Nat. Hung. VI (1908) 3791
 p. 528. — Peritheciis subcutaneo-erumpentibus, dense gregariis, globulosis, nigris, 100-120 μ . diam., ostiolo punctiformi, contextu parenchymatico; ascis clavatis, estipitatis, 6-8-sporis, 50-70 \times 20-22;

sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, leniter constrictis, granulosis, hyalinis, 20-28 \times 7-8, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis *Galtoniæ* candicantis cultæ in horto, Kecskemét Hungariæ.

84. *Sphærella Muscari* Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 3792
 p. 9. — Peritheciis epidermide velatis, dense gregariis, globulosis, nigris, 80-100 μ . diam., poro pertusis, contextu celluloso; ascis clavatis, astipitatis, 6-8-sporis, 50-54 \times 16-18, aparaphysatis; spo-

ridiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, vix constrictis, hyalinis, 16-20 \times 5,5-6, loculo superiore paullo crassiore.

Hab. in caulibus siccis *Muscari* comosi prope Kecskemét Hungariæ.

85. *Sphærella Burnati* (Cruchet) Sacc. et Trav. - Syll. XX, p. 818 - 3793

Mycosphærella Burnati Cruchet in Bull. Soc. Vaud. Scienc. Nat. XLIV (1909) p. 473 c. fig. — Peritheciis amphigenis, epidermide decolorata grisea tectis, dense gregariis, globosis, ostiolo conico prominente apertis, 200 μ . et ultra diam.; ascis oblongis, basi latioribus, apice subattenuatis obtusisque, 65-80 \times 22-24, pedicello brevi præditis; paraphysibus nullis; sporidiis 8, subdistichis, oblongis, utrinque obtusis, uniseptatis, ad septum leniter constrictis, hyalinis, in quoque loculo guttulatis, loculo superiore plerumque breviori et latiori, 27-33 \times 8-10.

Hab. in foliis languidis vel emortuis *Lloydie* serotinæ, in Alpihus Valesiacis Helvetiæ. — Socium adest *Asteroma Lloydie* Cruch.

86. *Sphærella Iridis* Awd. - Syll. I, pag. 524. - Sec. Cl. Sydow, in 3794
Mycoth. germ. fasc. XIV-XV, n. 677 (1908), et Ann. Myc. VI
(1908) p. 479 species sic describenda: — Maculis amphigenis, ob-
longis, 28 mm. longis, griseolis; peritheciis amphigenis, gregariis,
immersis, epidermide primo tectis, globosis vel depresso-globosis,
atris, membranaceis, 60-110 μ . diam., poro minuto pertusis; ascis
late ellipsoideis v. saccatis, apice plerumque rotundatis; basi sæ-
pius attenuatis, subsessilibus, 35-45 \times 17-20, octosporis; sporidiis
subtristichis, oblongis, utrinque rotundatis, circa medium septatis
et plus minusve constrictis, 15-18 \times 4-6, hyalinis.

Hab. in foliis *Iridis Pseudacori*, *I. pumilæ* etc. in Ger-
mania, Britannia, Italia. — Var. *anceps* Sacc. Ann. Mycol. VII
(1909) pag. 4. — A typo differt imprimis peritheciis hinc inde
dense maculiformiter confertis, amphigenis et a *Sph. Desmazieri*
ascis (etsi immaturis!) sporidiisque multo majoribus. — In foliis
morientibus *Iridis Pseudacori*, Eichwalde pr. Berolinum (H.
Sydow). — In exempl. immaturis: perithecia 120-130 μ . diam.,
asci 60 \times 9; sporidia 12-15 \times 4 (?).

87. *Sphærella Musæ* Spegazz. An. Mus. Nac. Buenos Aires, t. XIX 3795.
(1909) p. 354. — Maculis nullis vel fusciscentibus obsoletis; pe-
ritheciis innatis lenticularibus membranaceis, late ostiolato-perfo-
ratis, atris, glabris, 80-90 μ . diam.; ascis obclavatis, aparaphysa-
tis, octosporis 38-40 \times 6-8; sporidiis e cylindraceo subfusoides me-
dio vix constrictis, loculis æquilongis, minute biguttulatis, 12-13 \times 2.

Hab. ad folia dejecta putrescentia *Musæ sapientum* in
hortis Orán, Jujuy, Rep. Argentina Amer. austr.

88. *Sphærella Cannæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3796
(1909) p. 350. — Maculis nullis, matrice tota sordide pallescente;
peritheciis innatis, sparsis v. laxissime gregariis amphigenis e len-
ticulari globulosis 90-100 μ . diam., submembranaceis atris, glabris;
ascis fusoides, breviter crassiusculeque pedicellatis 40 \times 10, aparaphysatis, octosporis; sporidiis ellipsoideo-fusoides, didymis, 12 \times 4,
loculis minute biguttulatis, infero leniter minore.

Hab. ad folia dejecta putrescentia *Cannæ indicæ* in horto
Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr.

89. *Sphærella frenumbensis* Speg., Fungi Paul., Rev. Mus. La Plata 3797
t. XV (1908) p. 19. — Maculis arescentibus indeterminatis, 5-25
mm., amphigenis; peritheciis erumpentibus sparsis v. laxè grega-
riis plerumque epiphyllis, minutis, e globoso lenticularibus 75-100 μ .
minute ostiolatis, atris, glabris, contextu parenchymatico fusco-fu-

ligineo; ascis ellipsoideis v. subovatis, crassissime tunicatis brevissimeque noduloso-pedicellatis, $30-40 \times 8-10$, aparaphysatis, octosporis; sporidiis subclavulatis, $10-12 \times 8-10$, loculis æquilongis donatis, ad septum non constrictis, conglobatis v. distichis, hyalinis.

Hab. ad folia languida Palmæ pinnatifidæ (Cocoes?) cujusdam, prope Frenumbé Brasilia (USTERT). — Species *Sph. Gastonis* Sacc. peraffinis sed biophila et sporis nonnihil majoribus distincta.

90. *Sphærella chusqueicola* Speg., Fungi Chilenses (1910) p. 57. — 3798
Maculis nullis; peritheciis epiphyllis innato-erumpentibus superficialibus minutis, glabris, membranaceis, vix papillulato-ostiolatis $120-150 \mu$. diam.; ascis e cylindraceo-lanceolatis brevissime crasseque pedicellatis, $80 \times 15-18$; sporidiis e cylindraceo subclavulatis utrinque obtusis, medio 1-septatis non constrictis, hyalinis, medio-cribus, $18-20 \times 5$.

Hab. in foliis siccis non dejectis Chusqueæ Cumingii, Cerro Caracol de Concepcion, Chile Amer. austr.

91. *Sphærella Usteriana* Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3799
(1908) p. 20. — Maculis nullis; peritheciis sparsis v. amphigenis seriatim constipatis et erumpentibus, hemisphærico-lenticularibus, $50-75 \mu$. cr., atris, glabris, minute ostiolatis, membranaceis, contextu parenchymatico fuligineo; ascis subfasciculatis, antice attenuato-obtusatis crassissimeque tunicatis, $26-28 \times 13-14$, aparaphysatis, octosporis; sporidiis conglobatis, subovatis $10-12 \times 3$, medio uni-septatis leniter constrictis utrinque obtusiusculis, hyalinis.

Hab. ad folia arida Oryzæ sativæ prope Sao Paulo, Brasilia (USTERT). — Species a cæteris in eadem matrice vigentibus satis riteque distincta.

92. *Sphærella Hondai* I. Miyake, Pilze Reispfl. Japan, Journ. College 3800
Agric. Tokyo, II (1910) p. 245 t. XIII, f. 9-11. — Peritheciis immersis, papilla tenui prominulis, globosis v. ellipsoideis, $50-60 \mu$. diam., raro 40μ . v. 80μ ., nigro-brunneis; ascis clavatis, breviter pedicellatis, rectis v. subcurvulis, $30-50 \times 9-14$, octosporis; sporidiis distichis v. irregulariter tristichis, bilocularibus, loculis inæqualibus, medio non constrictis, ovoideis, chlorinis, $10-14 \times 3-4.5$.

Hab. in foliis Oryzæ sativæ, Suigen, Korea (K. IWAMOTO), Tochigi, Iaponia (K. TSUCHIYA).

93. *Sphærella Shiraiana* I. Miyake, Pilze Reispfl. Japan, Journ. Col- 3801
lege Agricult. Tokyo, II (1910) p. 242, t. XIII, f. 4-8. — Peritheciis immersis, globosis v. ellipsoideis, $70-95 \mu$. diam., $55-80 \mu$.

alt., nigris, pseudoparenchymaticis; ascis clavatis breviter pedicellatis 35-45 \times 11-15, octosporis; sporidiis supra plerumque tristichis infra monostichis, fusoideis, granuloso-farctis, 14-16 \times 4,5-5,5, biocularibus, medio constrictis, loculis inæqualibus.

Hab. in foliis *Oryzæ sativæ* in Japonia et China.

94. *Sphærella bambusicola* (M. et H.) Sacc. et Trott., *Mycosphærella* 8802 *bambusicola* Miyake et Hara in Bot. Mag. Tokyo (1910) p. (338) [japonice].

Hab. in foliis *Bambusæ* sp. in Japonia.

95. *Sphærella striatiformans* (Cobb) Sacc. et Trott., *Mycosphærella* 8803 *striatiformans* Cobb B. A. Fungous Maladies of the Sugar-Cane III, Leaf-Splitting, Blight, Hawaiian Sugar Planters Exp. St. Bull V (1906) pp. 93-106, Duggar Fung. Diseases, p. 263. — Folia rimose findens et demum in filamenta redigens; peritheciis copiosis, ascigeris....

Hab. in foliis *Sacchari officinarum*, cui valde noxia, in insulis Hawai. — A *Sph. Sacchari* Speg. videtur diversa.

96. *Sphærella Calamagrostidis* (Volk.) Sacc. et Trott., *Mycosphærella* 8804 *Calamagrostidis* Volk., Rehm Ascom. exsicc. n. 1667 (1906) (sine diagnosi. — Peraffinis *Sph. Tassianæ* a qua differt peritheciis vertice non conoideis.

Hab. in foliis *Calamagrostidis variæ*, Fürstenalp, Graubünden Helvetiæ.

97. *Sphærella kerguelensis* P. Henn., Deutsche Südpolar-Exped. VIII 8805 (1906) p. 9 (extr.). — Peritheciis in maculis exaridis pallidis sparsis, innato-erumpentibus, subglobosis, vertice perforatis, membranaceis, atris, 80-100 μ . diam.; ascis fasciculatis, clavatis v. subfusoideis, apice obtusis, substipitatis, curvatis, aparaphysatis, 25-30 \times 10-13; sporidiis subdistichis v. conglobatis, fusoideis, subacutiusculis, hyalinis, medio 1-septatis, rectis v. curvulis, 10-12 \times 3-3,5.

Hab. in foliis vaginisque *Festucæ kerguelensis*, Kerguelen-Station insul. Kerguelen (E. WERTH).

98. *Sphærella paleicola* P. Henn., Deutsche Südpolar-Exped. VIII 8806 (1906) p. 9 (extr.). — Peritheciis paleicolis sparsis vel gregariis, innato-suberumpentibus, globulosis, atro-membranaceis, poro per-tusis, 50-60 μ . diam.; ascis subovoideis vel late fusoideis, apice obtusis, tunicatis, octosporis, aparaphysatis, 22-28 \times 13-15; sporidiis conglobatis, fusoideis, hyalinis, 1-septatis, 10-12 \times 3-3,5.

Hab. in paleis siccis *Festucæ erectæ* Südmire in insula Kerguelen.

99. *Sphærella Ephedræ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 3807

p. 331. — Peritheciis epidermide tectis, dense gregariis, depresso-globosis, nigris, apice pertusis, 100-150 μ . diam., contextu parenchymatico; ascis clavatis, estipitatis 6-8 sporis, 56-70 \times 20-24, aparaphysatis; sporidiis inordinate distichis, oblongis, medio 1-septatis, constrictis, utrinque rotundatis, initio hyalinis, dein flavidulis, 2-guttulatis vel eguttulatis, 16-24 \times 6-8, loculo superiore plerumque paullo crassiore.

Hab. in ramis siccis *Ephedræ* distachyæ prope Kecske-mét Hungariæ.

100. *Sphærella pinifolia* Ducomet, Ann. Ecole nat. Agricult. Rennes 3808

t. II (1908) extr. pag. 23, fig. 7-13. — Thallo præcipue superficiali; mycelio brunneo catenulato; pycnidiis variabilibus, aliis parum evolutis, parvis, cupuliformibus, 20 μ . c. cr., aliis evolutis, ostiolatis, 60 μ . c. cr.; sporulis hyalinis fusiformibus, guttulatis, 5 \times 1,5; peritheciis scutatis, 86-110 \times 45-50; stratu corticali crasso et nigro; ascis curvatis 22-25 \times 7,5-9, octosporis; paraphysibus nullis; sporidiis hyalinis, bicellularibus, guttulatis, curvis, utrinque rotundatis, 9 \times 2,5-3.

Hab. in foliis vivis *Pini* maritimæ, Lot-et-Garonne Galliæ.

101. *Sphærella callistea* Syd., Ann. Mycol. VII (1909) p. 439, Myc. 3809

cotheca germanica, fasc. XVI-XVII, num. 785. — Maculis amphigenis valde conspicuis, irregularibus, præcipue apicem foliorum occupantibus, linea obscuriore cinctis, flavo-brunneis; peritheciis epiphyllis plus vel minus dense gregariis, depresso globosis, 80-140 μ . diam., atris, membranaceis, diutius tectis, medio pertusis; ascis aparaphysatis, oblongo-clavatis, apice rotundatis, sessilibus v. subsessilibus, 50-90 \times 16-20, octosporis; sporidiis conglobatis v. distichis, ellipsoideis, utrinque obtusis; medio v. prope medium constricto-1-septatis, hyalinis, strato mucoso hyalino tenui cinctis, 18-22 \times 9-12, loculo altero sæpe paullo majore.

Hab. ad folia viva *Osmundæ* regalis pr. Müritz Germaniæ (Sydow).

102. *Sphærella Asplenii* Awd. - Syll. I, pag. 533 - var. *Aspidii* v. 3810

Höhn. in litt., in Rehm, Ascom. Exsicc., fasc. 43, num. 1809 et Ann. Mycol. VII (1909) pag. 136. — Sporidiis 12-13 \times 2-3; ascis 32-36 \times 7-8; peritheciis 90-100 μ .

Hab. in frondibus siccis vetustis *Aspidii* Filix-mas, Schlading Styriæ sup. (Hönnel).

103. *Sphærella aquilina* (Fr.) Auersw. - Syll. I, pag. 532 - f. *Aspi-* 3811

diorum Sacc., Ann. Mycol. VII (1909) p. 435. — Peritheciis hinc inde maculiformiter gregariis, epiphyllis, 70-80 μ . diam.; ascis 32-34 \times 6-7; sporidiis 9 \times 2,5.

Hab. in frondibus languidis *Aspidii* sp. ad Tiefensee pr. Werneuchen (H. Sydow). — Conferenda cum *Sph. Asplenii* v. *Aspidii* v. Höhn.

104. **Sphærella Ascophylli** (Cotton) Sacc. et Trott., *Mycosphærella* 3812
Ascophylli Cotton, Trans. Brit. Mycol. Soc. 1908 v. III (1909) p. 95, tab. IV. — Peritheciis minutissimis, piriformibus, nigris, sparsis, immersis, 100-130 \times 80-90, ostiolo minuto non prominenti; ascis paucis, oblongis, sæpe curvulis, apice incrassato-tunicatis, octosporis, 50-60 \times 18-20, aparaphysatis; sporidiis distichis, fusoides, 1-septatis, non constrictis, 18-21 \times 4-5, hyalinis.

Hab. in receptaculis vivis *Ascophylli* nodosi (algæ) in mari ad littora Britanniae, ins. Faeroe, Heligoland Sueciae. — Mycelium intra matricis receptacula diffusum.

Sphærellæ species non satis notæ, memoratæ in Syll. vol. XX p. 330, sunt: *Sphærella Alchemillæ* Kalchbr. — *Sph. chalcographa* Kalchbr. — *Sph. minuta* Auersw.

EPICYMATIA Fuck. — Syll. I p. 570, XI p. 303, XVI p. 435.

1. **Epicymatia Balani** Winter apud Hariot in Journ. de Bot. I (1887) 3813
 p. 233. — Peritheciis gregariis, immersis, demum vertice tantum emergentibus, subglobosis, poro simplici pertusis, membranaceo-coriaceis, atris, 120-140 μ . diam.; ascis clavatis, deorsum substipitatis, vertice late rotundatis, mox diffluentibus, octosporis, 60 \times 17-19; sporidiis subdistichis, oblongo-subclavatis, utrinque attenuatis, sed rotundatis, medio 1-septatis et vix constrictis, hyalinis, 19-23 \times 6-7.

Hab. in thallo *Brachytrichiæ Balani* (algæ), in mari ad Saint Malo Galliae (BORNET).

REHMIELLOPSIS Bubák et Kabát, Naturw. Ztschr. f. Land-u. Forst-wirtschaft. (1910) pag. 320 (Etym. *Rehmiella* et *opsis* facies). — Stromata nulla; perithecia subepidermica, immersa, globoso-conica, apice erumpentia, coriacea, contextu pseudoparenchymatico, nigro-fusco; ascis 10-24-sporis, fusoides v. clavatis, breve stipitatis, aparaphysatis; sporidiis ellipsoideis v. oblongis, uniseptatis, utrinque rotundatis, hyalinis. — A *Mycosphærella* Johans. em. Sacc. — Syll. IX, p. 659 — ægre distinguendum genus.

1. *Rehmiellopsis bohémica* Bubák et Kabát, l. c. fig. 3-4. — Peri- 3814
 theciis globoso-conoideis, apice conico protuberantibus, 150-200 μ .
 latis, nigris, opacis, crasse tunicatis, contextu pseudoparenchyma-
 tico, nigro-fusco; ascis aparaphysatis, polysporis (10-24), clavatis
 v. fusoideis, 50-90 μ . longis, 20-24 latis, rectis v. parum curvatis,
 apice rotundato-attenuatis, basi paulatim attenuatis, brevi-stipita-
 tis, tunica tenui, facile in aqua intumescente; sporidiis ellipsoideis
 v. oblongis, 13-21 \times 5-6, hyalinis, uniseptatis, utrinque rotundatis,
 altera cellula semper angustiore.

Hab. in foliis *Abietis albae*, Turnau, Bohemia. — *Socia*
Phoma bohémica Bub. et Kab.

STIGMATEA Fr. — Syll. I p. 541, IX p. 660, XIV p. 534, XVI
 p. 478, XVII p. 649.

1. *Stigmatea Mespili* Sorauer, Monatschr. d. Ver. Beförd. d. Gartenb. 3815
 Preuss. (Jan. 1878) et Pflanzenkr. 2 Aufl. II, p. 372. — Perithe-
 ciis innato-superficialibus, sparsis v. in soros minutos confertis,
 globosis v. globoso-depressis, atro-brunneis, 100-175 μ . diam., o-
 stiolo vix perspicuo; ascis clavatis, 62-110 \times 12-25; sporidiis disti-
 chis, ovoideis v. breve clavulatis obtusis, constricto-1-septatis, hya-
 linis, 18-25 \times 6-7,5; paraphysibus filiformibus v. clavulatis.

Hab. ad folia viva, quæ infuscantur et pereunt Piri, Cydo-
 niæ, Cotoneasteris et Mespili in Germania, Helvetia,
 Italia, Amer. bor. — Status pycnidicus vel potius conidicus est
Entomosporium maculatum Lév.

2. *Stigmatea lauricola* Rehm, Ascom. exs. fasc. 44, n. 1847, Ann. 3816
 Mycol. VII (1909) p. 404. — Peritheciis hypophyllis, gregariis,
 primitus minutissime papillulatis, 100 μ . diam., contextu tenui
 parenchymatico, flavo-fusco; ascis subclavatis, teneris, apice ro-
 tundatis, 90-100 \times 15-18; sporidiis oblongis, rectis, utrinque rotun-
 datis, medio 1-septatis leniterque constrictis, hyalinis, intus sæpe
 minutissime granulosi, 20-24 \times 7-8, distichis; paraphysibus filifor-
 mibus, septatis, 4-8 μ . cr.

Hab. ad folia putrescentia *Lauri nobilis*, pr. Ziebigk, Des-
 sau Germaniæ (STARITZ).

3. *Stigmatea plantaginicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3817
 (1909) pag. 358. — Maculis nullis v. obsoletissimis plus minusve
 diffusis lutescenti-pallescentibus; peritheciis epiphyllis-superficia-
 libus lenticularibus, 60-80 μ . diam., obsolete impresso-ostiolatis, hy-
 phis marginalibus parvis radiantibus septulatis gracilibus 4 μ . cr.

olivaceis ornatis; ascis ovoideis $28 \times 10-14$, aparaphysatis, octosporis; sporidiis conglobatis, ellipsoideo-subclavulatis, didymis, hyalinis, $10-11 \times 4$, loculis subæqualibus grosse 1-guttulatis.

Hab. ad folia viva Plantaginis myosuri in pratis circa Ensenada Rep. Argentina America austr.

4. **Stigmatea quercina** Rehm, in Krieger; Ann. Mycol. IV (1906) 3818 p. 40. — Peritheciis in epiphyllis haud mutato gregarie innatis ab eoque paullulum protuberante tectis, demum denudatis, globulosis, excipulo molli, membranaceo, fuscidulo, poro pertusis, siccis nigrescentibus, glabris $150-180 \mu$. diam.; ascis cylindraceis, $70-75 \times 8-9$, octosporis; sporidiis ellipsoideis, medio septatis, haud constrictis, hyalinis, $9-10 \times 4,5-5$, monostichis; paraphyses desunt.

Hab. ad folia Quercus prope Königstein a/E. — *Sphaerellæ Esculi* Cocc. et Mor. affinis.

5. **Stigmatea Hepaticarum** Patouill., Bull. trim. Soc. Myc. de France, 3819 vol. XXI (1905) pag. 121. — Peritheciis solitariis, superficialibus $300-500 \mu$. diam., nigris, glabris et æqualibus, coriaceo-membranaceis, subglobosis v. conoideis, apice truncatis, depressis et ostiolatis; ascis cylindraceis, stipitatis 80×15 , octosporis; paraphysibus copiosis, linearibus, valde ramosis; sporidiis hyalinis, distichis, uni-septatis, medio constrictulis, loculis inæqualibus, multiguttulatis, $18-22 \times 7-8$; pycnidiis (*Pyrenochaeta Hepaticarum*) sparsis, nigris, opacis, ventricosis $75-120 \mu$. diam., collo 60×30 apice setuloso præditis; sporulis hyalinis, ovoideis $4-5 \times 3$ biguttulatis, copiosis conglutinatissimis, cirrum cylindraceum efformantibus; spermoconiis globulosis 60μ . diam., nigris, apice ostiolatis; sporulis hyalinis, cylindraceis, rectis v. curvulis 3×1 .

Hab. ad thallum Lunulariæ sp., Algeria Africa bor.

6. **Stigmatea Velenovskyi** Bubák, Ann. Mycol. IV (1906) p. 109. — 3820 Peritheciis superficialibus, globoso-lenticularibus, $60-90 \mu$. diam., atro-brunneis, sparsis v. in soris minutis confertis, hyphis mycelii ramosis, castaneis, crebro septatis, adpresse radiantibus cinctis, ostiolo centrali 20μ . diam., contextu parenchymatico, crassiusculo; ascis ovoideis, $22-35 \times 15-17$, apice late rotundatis, incrassatis, brevissime pedicellatis, octosporis; sporidiis oblongis, $11-15,5 \times 4,5-5,5$, utrinque rotundatis, inæqualiter bicellularibus, hyalinis, ad septum constrictis, 2-guttulatis, cellula superiori pro more paullo latiore.

Hab. ad folia Hypni ochracei, Weisswassergrund, Riesengebirge Bohemiæ (VELENOVSKY).

VENTURIA De Not. — Syll. I p. 586, IX p. 687, XI p. 305, XIV p. 541, XVI p. 489, XVII p. 650.

I. *Euventuria*: sporidia hyalina, achroa.

1. *Venturia sphærelloidea* von Höhn., *Fragm. Mykol.* VIII (1909) 3821 p. 47. — Peritheciis gregariis subcutaneis, e basi ovoidea globulosis, 100-120 μ . lat., 140 μ . alt., contextu tenui brunneo præditis, circa ostiolum setulis 1-3 brunneis, continuis, obtusis, 10 \approx 4 usque ad 60 \approx 6-7 ornatis, basi hyphulis pallidis 2-3 μ . cr., repentibus cinctis; ascis aparaphysatis, fusoides-clavulatis, sessilibus, octosporis, tenui-tunicatis, 32-44 \approx 5-8; sporidiis mono-distichis, fusoides, hyalinis, bicellularibus, 4-guttulatis, utrinque acutulis, medio non constrictis, 10-12 \approx 3-4, cellulis æqualibus.

Hab. in caulibus emortuis *Impatiensis Nolitangere*, Sonntagsberg Austriæ inf. (P. STRASSER).

2. *Venturia Missionum* Speg., *An. Mus. Nac. Buenos Aires* t. XVII 3822 (1908) p. 121. — Superficialis, dense gregaria, minutissima, nigra; peritheciis globosis v. subdepressis 90-100 μ . diam., ostiolo minuto perforatis, setulis laxis acutis, 30-50 \approx 8-6, non bulbosis adpersis, contextu coriaclello indistincto, atro; ascis clavulatis, aparaphysatis, apice rotundatis, deorsum cuneatis breviterque noduloso-pedicellatis, 35-40 \approx 8-9, octosporis; sporidiis distichis, ellipsoideis, utrinque obtusiusculis, 10 \approx 4, 1-septatis, vix constrictis, hyalinis, 2-guttulatis.

Hab. ad ramulos languidos v. emortuos *Ilicis paraguariensis* (*Yerba*) in dumetis circa S. Pedro, Misiones, Argentina.

3. *Venturia pirina* Aderhold *Landw. Jahrb.* XXV (1896) p. 875, *Vent.* 3823 *ditricha* f. *Piri* Bref. *Unters.* X, t. VII, f. 59, *Sphærella sentina* (Fr.) Sacc. *Syll.* I, pag. 482, non Fuck. — Peritheciis confertis v. gregariis, sæpius hypophyllis, erumpentibus, globosis, 120-160 μ . diam., breviter v. longiuscule papillatis, setulis paucis circa ostiolum coronatis, deorsum sæpius calvis; ascis 8-sporis, saccatis, infra medium incrassatis, 40-70 μ . longis; sporidiis infra distichis, sursum monostichis, oblongatis, flavo-viridibus, 14-20 \approx 5-8, inæqualiter bicellularibus, cellula super. crassiore et duplo longiore, rarius loculis subæqualibus.

Hab. in foliis *Piri communis* in Germania, Helvetia, Fennia, Britannia, Italia, Gallia, Amer. bor. — Status conidicus: *Fusicladium pirinum* (Lib.) Fuck. — *Syll.* IV, p. 346. — Conidio-

phoris erectis, simplicibus, plerumque continuis, brunneis, nodulos, 20-60 sæpius 40 μ . long.; conidiis fusoides v. navicularibus, continuis, dein 1-septatis, 20-25 \times 5-8.

4. *Venturia Usteriana* Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3824 (1908) p. 21. — Maculis amphigenis indeterminatis pallescentibus; peritheciis hinc inde gregatim erumpentibus, sæpius hypophyllis, udis globosis, siccis corrugato-collapsis, 60-100 μ . diam., astomis?, membranaceo-coriacellis, contextu dense minuteque parenchymatico fuligineo donatis, setulis divaricatis simplicibus 2-3-cellularibus acutiusculis, 20-40 \times 4-5, fumosis adspersis; ascis e fusoides cylindraceis, antice subtruncato-rotundatis postice breviter cuneatis, pedicello brevissimo crassoque suffultis, 50-60 \times 7-9, pseudoparaphysibus paucis circumdatis; sporidiis octonis oblique distichis 14-15 \times 3-3,5, apice supero obtuso, infero subacutiore, medio non constrictis, hyalinis.

Hab. ad folia viva Compositæ cujusdam in Horto botanico Sao Paulo Brasiliæ (USTERI). — Cum peritheciis ascophoris adsunt pycnidia nonnulla simillima, sporuligera, sporulis ellipsoideis utrinque acutiusculis 3-5 \times 1,5 minute biguttulatis, hyalinis.

5. *Venturia pellita* Hazsl., Sphær. Hungar. p. 127, t. VIII, f. 33 (1892). 3825 — Peritheciis globosis, minutis, gregariis, totam superficiem caulium occupantibus, excepto ostiolo setis nigris septatis tectis; ascis clavatis, basim versus æqualiter attenuatis in infima tertia parte vacuis, paraphysatis; sporidiis uniseriatis, cuneiformibus, 1-septatis, loculo super. subgloboso, inferiori cylindraceo, rarius cylindraceis, 14-16 \times 4, hyalinis.

Hab. in caule Cardui acanthoidis ad radices Tatræ Hungariæ.

6. *Venturia Bellotæ* Speg., Fungi Chilenses (1910) p. 50. — Peritheciis hypophyllis laxè pauci-gregariis (3-10) superficialibus subglobosis, atris, submembranaceis, 90-110 μ . diam., setulis 8-10 nigris opacis, 50-60 \times 4-5 hirtis; ascis sublanceolatis paraphysatis sessilibus, 30 \times 4, octosporis; sporidiis cylindraceo-subfusoides parvis ad septum medium non constrictis, 9-10 \times 2-2,5.

Hab. in foliis siccis dejectis *Cryptocaryæ* Bellotæ in silvis Cerro Caracol de Concepcion, Chile Amer. austr.

7. *Venturia Puyæ* Speg., Fungi Chilenses (1910) p. 51, cum icon. — 3827 Maculis nullis; peritheciis pusillis sparsis v. laxè gregariis, globosis, dense setuliferis, atris, 100-120 μ . diam., setulis 10-20, 40-80 \times 6-10; ascis subcylindraceis brevissime pedicellatis, paraphysatis, octo-

sporis, 50-55 \times 7-8; sporidiis ellipsoideis, ad septum non constrictis hyalinis, 9-12 \times 4-5.

Hab. in foliis emortuis subputrescentibus Puyæ cæruleæ, Cerro San Cristobal de Santjago, Chile Amer. austr.

8. *Venturia corralensis* Speg., Fungi Chilenses (1910) p. 51. — 3828
 culis nullis; peritheciis sparsis superficialibus, atris, sublenticularibus, 90-120 μ . diam., margine setulis 5-7 atris, opacis radiantibus, 60-70 \times 5-7 ornatis; ascis sporidiisque desideratis.

Hab. in foliis emortuis siccis Uncinæ erinaceæ, Bahía de Corral Chile Amer. austr.

9. *Venturia Hariotiana* Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3829
 (1908) p. 20. — Maculis amphigenis majusculis impressis, 5-15 mm. diam., margine acute elevatis, callosis, fuscescentibus, eximie limitatis, primo sordide pallideque fulvellis, serius albido-cinere-scentibus; peritheciis sæpe circinantibus numerosis parvulis 100-120 μ . diam., globoso-depressis, subastomis v. minute fimbriato-ostiolatis, setulis patulis minutis 20-30 \times 4-5 fuliginis, uni-cellularibus densiuscule vestitis, basi hyphis repentibus radiantibusque concoloribus 50-100 \times 6, septulatis cinctis, coriacellis, contextu indistincto; ascis e cylindraceo subfusoides 60 \times 10, antice subtruncato-rotundatis, postice brevissime noduloseque stipitatis, apophysatis, octosporis; sporidiis oblique distichis utrinque acutiusculis, 15-16 \times 3-4, uniseptatis, ad septum constrictulis, loculis minute bi-guttulatis, hyalinis.

Hab. ad folia arida subputrescentia *Oncidii* cujusdam, Ipiranga Moça Brasilia (USTERI). — Species *Trichosphæriæ Hariotianæ* Karst. valde affinis; an ejusdem forma juvenilis?

II. *Chromoventuria*: sporidia colorata.

10. *Venturia austro-germanica* Rehm, Oesterr. bot. Zeitschr. L VI 3890
 (1906) p. 295 et Ann. Mycol. V (1907) p. 538. — Peritheciis dispersis, sessilibus, globulosis, poro minutissimo pertusis, atris, membranaceis c. 150 μ . diam., setis numerosissimo sparsis, rectis, acutatis, subfuscis 100 \times 4-5 ubique obsessis; ascis fusiformibus vel subclavatis, sessilibus, 60-70 \times 15, 8-sporis; sporidiis oblongo-fusiformibus, utrinque rotundatis, medio septatis, vix constrictis, cinereo-fuscis, 20-24 \times 7-8, distichis; paraphysibus paucis, filiformibus, 2 μ . cr.

Hab. ad folia sicca Salicis in jugo Schrofenspass inter Tiro-

liam et Algoviam bav. 1750 m. (Dr. REHM). — Affinis *Venturia Niesslii*, sed sporidia æquicellularia, colorata.

11. *Venturia Frangulæ* Krieg., Ann. Mycol. VII (1909) p. 542, Krieg., 3831

Fungi saxon. n. 2068. — Peritheciis plerumque hypophyllis, confertis, globosis, 60-80 μ . diam., circa ostiolum setulis 22-30 \times 3-6 præditis; ascis cylindrico-ovoideis, sessilibus v. brevissime pedunculatis, octosporis, 34-45 \times 6-10; sporidiis distichis, ellipsoideis v. ovoideis, septatis, griseo-fumosis, 7-10 \times 2-4, paraphysibus paucis.

Hab. in foliis putrescentibus *Frangulæ Alni* prope Kőnigstein Germania.

12. *Venturia Antherici* Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 3832

p. 9. — Peritheciis seriatim dispositis, erumpentibus e basi globosa conicis, 140-160 μ . diam., contextu celluloso, apice setis rigidis, 100-140 \times 5, fusco-atris obsitis; ascis clavatis, brevissime stipitatis, 75-80 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis distichis, oblongo-ellipsoideis, medio 1-septatis, constrictis, 4-guttulatis, dilute olivaceis, 16-18 \times 4-5.

Hab. in foliis siccis *Antherici Liliaginis* prope Nagy-Körös Hungariæ.

COLEROA Fr. ut subg. (1849) em. Rabenh. Herb. Mycol. n. 1456 (1850), Winter Krypt. Flóra, Pilze II, p. 198 (Etym. *colerai* oves breviter lanatæ). — A gen. *Venturia* distinguitur imprimis peritheciis ab initio superficialibus, semper biogenis. — Plures species *Venturiæ* in Syll. descriptæ ad hoc genus transferendæ sunt. Cfr. Wint. l. c.

1. *Coleroa spinarum* v. Höhn., Ann. Naturhist. Hofmus. Wien, XX 3833

Heft 4 (1905) pag. 2 (extr.). — Peritheciis sparsis v. cæspitosis, superficialibus, nigris, excipulo tenui, globosis, 120-220 μ . diam., ostiolo obsoleto, fragilibus, extus setulis copiosis, nigris, rigidis, acutis, opacis, simplicibus, 150 \times 5-6, conspersis; nucleo carneo; ascis aparaphysatis, clavatis, subcarneis, tenuibus, 60-64 \times 9-10; sporidiis octonis, 2-3-stichis, bicellularibus, plerumque non constrictis, hyalinis, late fuscoideis, utrinque acutis, 12-14 \times 4-5, intus granulosis.

Hab. ad spinas *Astragali* sp. pr. Erdschias-Dagh Asiæ minoris (A. PENTHER et E. ZEDERBAUER).

2. *Coleroa venturioides* Speschn., Die Pilzparasiten d. Teestrauches 3834

(1907) p. 19, tab. III, fig. 14-19. — Peritheciis gregariis, subglobosis, cupuliformibus, ochraceis, primo epidermide leviter tectis, dein epiphyllis, subsuperficialibus, 100-130 μ . lat., 50-80 μ . altis,

setulis flexuosis, septatis, fuligineis, 50-60 \times 5-6 vestitis; ascis clavatis, 30-40 \times 8-10, paraphysatis, octosporis; sporidiis oblongo-ovoideis, dilutissime chlorinis, 14 \times 8.

Hab. in maculis brunneolis indistinctis foliorum *Theæ sinensis* pr. Batum Caucasi.

3. *Coleroa Elasticæ* Koord., Botan. Untersuch. (1907) p. 186, f. 17 I 8886

— Peritheciis sparsis, superficialibus, amphigenis v. corticulis, imprimis hypophyllis, coriaceis, atris, globosis, plerumque basi longe setulosis, apice ostiolo orbiculari pertusis, 90-110 μ . diam.; ascis clavatis, apice rotundatis, 8-sporis, 35 \times 12 apice haud incrassatis, paraphysatis; sporidiis biserialis, ovoideo-fusiformibus, medio 1-septatis, non constrictis, utrinque rotundatis, pallide olivaceis, 7-10 \times 2,5-3; setulis 200-390 μ . longis, atris, apice acuminatissimis, rectis v. curvulis.

Hab. in foliis emortuis et in cortice ramulorum *Fici elasticæ* prope Loano, Purworedjo prov. Kedu insulæ Java (KOORDERS). — *Venturia Elasticæ* Pass. proxima.

DIDYMELLA Sacc. — Syll. I p. 545, IX p. 661, XI p. 301, XIV p. 535, XVI p. 479, XVII p. 653.

1. *Didymella Adonidis* Moesz, Gomb. Budapest I in Bot. Közlem. (1909) 8886

p. 8, t. II, f. 2 a-c. — Peritheciis sparsis v. subgregariis, epidermide tectis, dein erumpentibus, minutis, atris, epapillatis, 66-133 μ . diam.; contextu parenchymatico, fuligineo; ascis clavatis, stipitatis, 50-66 \times 12-13, octosporis, paraphysibus filiformibus obvallatis; sporidiis subtristichis, oblongo-ellipsoideis, rectis vel leniter curvatis, 19-26,5 \times 3-4,5, hyalinis, uniseptatis, non constrictis multiguttulatis.

Hab. in petiolis siccis *Adonidis vernalis*, prope Budapest Hungaria.

2. *Didymella Alyssi* Hollós, Ann. Mus. Nat. Hungar. V (1907) p. 47. 8887

— Peritheciis gregariis sparsisve, erumpentibus, globosis, ostiolatis, nigris, nitidulis, 280-350 μ . diam.; ascis clavatis, apice rotundatis et incrassatis, stipitatis, octosporis, 90-100 \times 14-16, filiformi-paraphysatis; sporidiis distichis v. oblique monostichis, oblongis, apice leniter attenuatis, rectis v. curvulis, medio 1-septatis, non v. constrictis, interdum inæqualibus, 4- v. pluriguttulatis, hyalinis, denique luteolis, 26-32 \times 7-8.

Hab. in caulibus siccis *Alyssi tortuosi* prope Kecskemét Hungariæ.

3. *Didymella Delphinii* Earle, Bull. of the N. York Bot. Gard. (1904) 3838 p. 293. — Peritheciis late sparsis, in areis amplis dealbatis innatis, demum partim expositis, nigris, subsphæroideis, prominulis, non collabentibus, 250-300 μ . diam., ostiolo minute papillato; ascis clavatis, breviter stipitatis, 80-90 \times 12-14, parce. et obsolete filiformi-paraphysatis; sporidiis distichis, hyalinis, anguste ovoideis v. subellipsoideis, subinæqualiter 1-septatis, constrictis, cellula latiore sæpe acutata, minore obtusa, 20-25 \times 7-8.

Hab. in caulibus emortuis *Delphinii* sp., Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

4. *Didymella obscura* Rehm, Ascom. exsicc. fasc. 46, n. 1887 et Ann. Mycol. (1910) p. 300. — Peritheciis gregariis, innatis, sub epidermide caulem ambiente late denigrata nidulantibus, demum fere sessilibus, globulosis, minutissime papillulatis, nigris, ad basim hyphis abeuntibus longis, constricto-septatis, fuscis, 4-7 μ . cr. obsessis, 0,1-0,15 mm. latis, fusce membranaceo-contextis; ascis oblongis, sessilibus, 45-48 \times 12, octosporis; sporidiis ellipsoideis, medio septatis constrictisque, utraque cellula biguttulata, hyalinis, demum dilute flavescens, 12-14 \times 4-6, distichis; paraphysibus ramulosis.

Hab. ad caules siccos *Meliloti* albæ prope Königstein a. E. Saxonie (KRIEGER).

5. *Didymella Coriariæ* Speg., Fungi Chilenses (1910) p. 60. — Ma- 3840 culis nullis; peritheciis parvis subglobosis, submembranaceis, sparsis v. pauci-gregariis, cortice insidentibus, epidermide velatis, vix papillato-ostiatis, 120-150 μ . diam.; ascis clavatis breviter pedicellatis paraphysatis, octosporis, 100 \times 15-16; sporidiis 1-septato-constrictulis, loculis subæqualibus grosse biguttulatis, 20-22 \times 6-7.

Hab. copiose in ramis siccis *Coriariæ* ruscifoliæ, Cerro Caracol de Concepcion Chile Amer. austr.

6. *Didymella Passifloræ* v. Höhnelt, Fragm. z. Mykol. in Sitzb. k. Ak. 3841 d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 123. — Peritheciis crebro gregariis, hypophyllis, areis vix cinrescentibus insertis, nigris, punctiformibus, 50-65 μ . diam., ovato-globulosis, papilla latiuscula; contextu brunneo celluloso; ascis parce crassiuscule paraphysatis, paucis, crasse clavatis, sæpe curvulis, sessilibus, 28-30 \times 10; sporidiis octonis, 2-3-stichis, hyalinis, bicellularibus, oblongo-cuneatis, 8-10 \times 2-2,5, cellula superiore plerumque paullulo crassiore et brevior.

Hab. in foliis *Passifloræ* sp. cultæ, Upalu in ins. Samoa Polynesie (Doct. RECHINGER).

7. *Didymella Eryngii* Moesz, Gomb. Budapest I in Bot. Közlem. (1909) 3842
pag. 8, t. II, f. 4. — Peritheciis subgregariis, epidermide tectis, dein erumpentibus, nigris, globosis v. depresso-globosis, papillatis, 140-360 μ . diam.; ostiolo 43-57 μ . diam., contextu dense parenchymatico, olivaceo-fuligineo, apicem versus nigrescente; ascis cylindraceo-clavatis, breviter stipitatis, 133-167 \times 17, octosporis, paraphysibus filiformibus obvallatis; sporidiis distichis, oblongis, inæquilateralibus, 33-43 \times 5-6,5, hyalinis, uniseptatis, ad septum lenissime constrictis, multiguttulatis.

Hab. in caule emortuo *Eryngii* campestris prope Budapest, Hungaria.

8. *Didymella Fruticosæ* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. 3843
d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 618. — Follicola; maculis inæqualiter circularibus v. oblongis, amphigenis, 1-2 mm. lat., purpureo-brunneis, margine crassiusculo nigro; peritheciis hypophyllis, innatis, leviter prominulis, nigris, duriusculis, 100-140 μ . diam.; contextu olivaceo-nigricanti; ascis crasse clavatis, parce filiformi-paraphysatis, octosporis, 56-75 \times 16-20, breve stipitatis, tunica crassiuscula; sporidiis 2-3-seriatis, dilute chlorinis, oblongo-clavatis, bicellularibus, minute pluriguttulatis, 20-26 \times 6-6,5, medio non constrictis, cellula sup. paullulo latiore et brevior.

Hab. in foliis vivis *Bupleuri* fruticosi prope Bastia Corsicæ, frequens.

9. *Didymella Tupæ* Speg., Fungi Chilenses (1910) p. 60, cum icon. 3844
— Peritheciis laxè gregariis, lenticularibus, minute papillato-ostiolatis, epidermide velatis nigris, glabris, membranaceo-coriacellis, 120 μ . diam.; ascis subcylindræis brevissime pedicellatis paraphysatis, octosporis, 100-110 \times 16-18 sporidiis distichis, elliptico-biconoideis mediocribus sæpius pergrosse biguttulatis ad septum constrictulis, hyalinis v. obsolete fumosis 22-24 \times 7-8.

Hab. in pedunculis emortuis *Lobelie* *Tupæ* prope Ciudad de Valdivia, Chile Amer. austr.

10. *Didymella Senecionis* Hollós, Ann. Mus. Nat. Hung. VI (1908) 3845
p. 529. — Peritheciis seriatim dispositis, erumpentibus, hemisphæricis, glabris, atris, membranaceo-coriaceis, papillatis, 300-350 μ . diam.; ascis clavatis, breviter pedicellatis, 110-120 \times 10-12 octosporis; paraphysibus capiosis, filiformibus, 1 μ . cr.; sporidiis oblique monostichis, medio 1-septatis, constrictis, utrinque attenuatis, utraque cellula 2 guttulas oleosas magnas includente, hyalinis, 20-24 \times 6-7.

Hab. in caulibus siccis Senecionis paludosi prope Kecskemét Hungariæ.

11. *Didymella Cocconia* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3846 p. 390. — Peritheciis in soros convexos hinc inde collectis, 0,4-0,6 mm. diam., ostiolo punctiformi non prominulo præditis; nucleo albo, contextu nigro; ascis filiformi-paraphysatis, tereti-fusoides, copiosis, apice rotundatis, brevibus 38-46 × 11-13, octosporis; sporidiis bicellularibus, hyalinis, 12-15 × 4, ovato-fusoides, distichis; paraphysibus ascos superantibus.

Hab. in stromate Cocconia Placentæ ad folia Symploci spicata, in M. Pangerango ins. Javæ.

12. *Didymella sambucina* Rehm, Ann. Mycol. V (1907) p. 538. — 3847 Peritheciis in ligno decorticato, longe denigrato gregariis, subinatis, hemisphærico-prominentibus, globulosis, atris, poro perspicuo pertusis, glabris, submembranaceis, 0,3-0,4 mm. diam.; ascis clavatis, 120 × 10, octosporis; sporidiis ellipsoideis, utrinque obtusis, medio subconstrictis, utrinque 2-guttulatis, hyalinis, 12-15 × 5 distichis; paraphysibus filiformibus.

Hab. ad ramum decorticatum Sambuci racemosæ in valle Venna montis Brenner, ca. 1900 m., Tirolie (Dr. REHM). — Affinis *D. acerina* sed sporidia minora, æquicellularia.

13. *Didymella Catalpæ* Hollós, Ann. Mus. Nat. Hung. V (1907) p. 47. 3848 — Peritheciis dense gregariis, erumpentibus, depresso-globosis, nigris, ostiolo brevi-papillato, 350-400 μ . diam.; ascis cylindraceis, brevi-stipitatis, octosporis, 100-120 × 10-12, filiformi-paraphysatis; sporidiis monostichis, ellipsoideis, medio 1-septatis, constrictis, minute bi-guttulatis, hyalinis, 17-21 × 8-10.

Hab. in ramis siccis decorticatis Catalpæ bignonioidis prope Kecskemét Hungariæ.

14. *Didymella præclara* Rehm in Krieger, Ann. Mycol. IV (1906) 3349 p. 39. — Peritheciis dispersis, cortici immutato innatis, globulosis, collò minuto solum denigrato poroque pertuso hemisphærico-prominentibus, excipulo parenchymatico, molli, fuscidulo, 150 μ . diam.; ascis fusiformibus, apice rotundatis, sessilibus, sæpe subcurvatis, 50-60 × 15, 8-sporis; sporidiis acute fusiformibus, plerumque rectis, medio septatis, haud constrictis, hyalinis, 30 × 5, tri-tetrastichis; paraphysibus tenerrimis, filiformibus, septatis, 2,5 μ . diam., gelatinosis.

Hab. ad ramulos Vaccinii Myrtilli prope Königstein ad Albim Germaniæ.

15. *Didymella ericina* (v. Tubeuf) Rehm, Ann. Mycol. V (1907) p. 538, 3851.
Sphaeria ericina v. Tubeuf, Botan. Centralbl. XXI (1885) p. 15.
 — Peritheciis epiphyllis, in soros nigros sæpe magno numero collectis, globulosis, epidermide tectis, demum leniter prominentibus, 100-110 μ . diam., poro rotundo pertusis, non papillatis; contextu grosse pseudoparenchymatico, atro; ascis clavatis, sessilibus, apice rotundatis, 40 \times 6, octosporis; sporidiis longe cylindraceis, utrinque rotundatis, medio septatis, non constrictis, hyalinis, 10 \times 2, distichis; paraphysibus tenuibus filiformibus.
Hab. in foliis emortuis *Ericæ carneæ* a Schluderbach ad Landro Tiroliae merid. (Doct. v. TUBEUF).
16. *Didymella sachalinensis* Sacc., Ann. Mycol. VI (1908) p. 558. — 3851
 Peritheciis gregariis epidermide velatis, dein erumpentibus nudatisque, globoso-depressis, $\frac{1}{8}$ - $\frac{1}{2}$ mm. diam., nigris, brevissime papillatis, contextu membranaceo-subcoriaceo, denso, atro; ascis cylindraceis, brevi-stipitatis, apice rotundatis, filiformi-paraphysatis, 110-120 \times 10-11, octosporis; sporidiis monostichis oblongo-ovoideis, 18-20 \times 8-9, 1-septatis, brevissime constrictis, nubiloso-guttulatis, hyalinis, loculo superiore sæpe paullulo crassiore.
Hab. in caulibus morientibus v. emortuis *Polygoni sachalinensis*, Rigny sur Arroux, 1908 (FLAGEOLET).
17. *Didymella involucralis* (Pass.) Saccardo, Not. Myc. VI, Ann. Myc. 3852
 III (1905) p. 511, *Metasphaeria involucralis* (Pass.) Sacc. — Syll. II, p. 172. — Ex spec. orig. in Rabenh. F. Eur. 1632 sunt asci 50-55 \times 6-8; sporidia 12-13 \times 3-3,2, ex hyalino dilutissime flaveola, medio constricto-1-septata, 4-guttulata nec 3-septata, ut auctor habet; hinc *Didymellæ* nec *Metasphaeriæ* species.
18. *Didymella Maxillariæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3853
 (1909) p. 356. — Maculis nullis sed matrice tota arescente ac subcinerescente; peritheciis innatis subglobosis, 75-100 μ . diam., epidermide velatis sed prominulis, membranaceis, atris; ascis obclavulatis 45-50 \times 10-12, pseudoparaphysibus crassis torulosis obval-latis; sporidiis ex ellipsoideo-fusoideis non v. leniter inaequilat-ralibus, medio non v. vix constrictis, 1-septatis, hyalinis, 14-15 \times 3-4.
Hab. ad folia *Maxillariæ rufescentis* in silvis Misiones, Rep. Argentina Amer. austr.
19. *Didymella glumicola* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3854
 t. XV (1908) p. 21. — Peritheciis laxè gregariis areola diffusa albescente cinctis, epidermidem diu obtegentem perforantibus, hemisphaerico-lenticularibus 80-100 μ . diam., minute ostiolatis, membra-

naceis, glabris, atris, contextu eximie parenchymatico fuscescente; ascis antice obtusissime rotundatis crassiusculeque tunicatis, postice breviter cuneatis, modicissime pedicellatis, 55-60 \times 10, octosporis, paraphysibus filiformibus parum longioribus commixtis; sporidiis rectis v. leniter inæquilateralibus, superne obtusiusculis, inferne acutiusculis, 10-12 \times 2-2,5 primo continuis dein medio septatis, ad septum non constrictis, hyalinis.

Hab. ad glumellas submaturas *Oryzæ sativæ* circa Sao Paulo Brasilæ (A. USTERI).

20. *Didymella arthonispora* Rehm apud Fairm., Proc. Rochester Ac. 3855 of Sc. IV (1906) p. 221. — Peritheciis sessilibus, gregariis, hemisphæricis, vix papillatis, ostiolo perspicuo pertasis, nigris, basi hyphis nonnullis brevibus, fuscis obsessis, 100 μ . diam., siccis collabentibus, contextu parenchymatico fuscidulo; ascis oblongis, apice rotundatis, sessilibus, 35 \times 15, octosporis; sporidiis subclavatis, medio septatis, vix constrictis, hyalinis, 18-20 \times 6-7, distichis, grosse 2-guttatis, cellula superiore latiore.

Hab. ad corticem arboris indeterminatæ dejectæ in silvis Lyndonville Amer. bor. — *D. Stenocarpī* proxima videtur.

21. *Didymella Lettauiana* von Keissler, Centralbl. für Bakter. etc. 3856 II Abt. (1910) p. 211, fig. 2. — Peritheciis dispersis compresso-disciformibus, magnis, superficialibus, nigris, sub microscopio brunneo-nigris, ostiolo subpapillato præditis, carbonaceis, 400-500 μ . d.; ascis cylindræis, distincte stipitatis (in aqua turgescentibus et demum subsessilibus evadentibus) rectis v. curvulis, tenuiter tunicatis, 8-sporis, 110 \times 25, paraphysibus distincte filiformibus, demum probabiliter confluentibus; sporidiis subcuneiformibus, 1-septatis, loculo superiore subgloboso, inferiore tenuiore oblongo vel duplo longiore, hyalinis v. chlorino-hyalinis, subdistichis, 18-22 \times 7-8.

Hab. in thallo tenuissimo vix visibili lichenoso (*Catillariæ chalybææ*?) ad lapidem in M. Flossberg pr. Ilmenau Thuringiæ (Doct. G. LETTAU). — An *Pharcidiæ* sp. observante auctore?

22. *Didymella Coarctatæ* Bouly de Lesdain, Bull. Soc. bot. France 3857 LIV [1907] 1908, p. 695. — Peritheciis minutis, nigris, levibus, parte tertia inferiori substrato infossis; ascis clavatis aparaphysatis; sporidiis octonis, 1-septatis, 12-21 \times 4-6.

Hab. in thallo *Lecideæ coarctatæ* pr. Versailles Galliæ. — Gelatina hymenialis jodi ope flavescit.

23. *Didymella darluciphila* Speg., An. Mus. Nac. Buenos Aires t. XIX 3558 (1909) p. 357, cum icon. — *Amphigena*, hinc inde dense aggre-

gata, 0,5-2 mm. long., 250-500 μ . lat.; peritheciis dense constipatis e lenticulari conoideis, 100-130 μ . diam., minute papillulato-ostiolatis, nigris, glabris; ascis e cylindraceo lenissime subfusoides v. subclavulatis, 50-75 \times 8-10, paraphysibus filiformibus vix longioribus parvis obvallatis; sporidiis e fusoides clavulatis, subcurvulis, 12-18 \times 3 medio 1-septatis, hyalinis, biguttulatis v. non.

Hab. ad glomerulos *Darluca australis* in foliis aridis *Andropogonis condensati* a *Puccinia andropogonicola* infectis, prope Posadas nec non prope Basavilbaso Rep. Argentina Americæ austr. — An status ascophorus *Darluca australis*?

24. *Didymella sphinctrinoides* (Zwackh) Berl. et Vogl. — Syll. IX, 3859 p. 671. — var. *Verrucariæ* Zopf, Paras. Pilze der Flecht. p. 176, f. 68 (1897). — Peritheciis breviter piriformi-ellipsoideis, minutissimis, nigris, sparsis; ascis cylindraceis, 12-13 μ . cr., jodo non coloratis, copiose ramoso-paraphysatis, 4-6-sporis; sporidiis bilocularibus, 2-guttatis, oblongis, utrinque rotundatis, loculo sup. paulo crassiore, hyalinis, 18-20 \times 7-8.

Hab. in thallo *Verrucariæ pachydermæ*, St. Anton am Arlberg Baviaræ. — Var. *aspicillicola* Zopf, l. c., pag. 176-178, fig. 69-72: a *Did. sphinctrinoide* differt ascis potius ovato-oblongis, nec cylindricis, multo parcius paraphysatis; sporidiis paulo angustioribus, leviter curvis, 18-21 \times 6,5-7,5. — In thallo *Aspicillie lævatae* v. *albicantis*, St. Anton am Arlberg Baviaræ.

MASSARINULA Gen. de Lamarl. — Syll. XIV p. 356, XVI p. 483, XVII p. 658.

1. *Massarinula chilensis* Speg., Fungi Chilenses (1910) p. 61, cum 3860 icon. — Peritheciis sparsis cortice innatis, epidermide velatis, lenticularibus, coriaceis, nigris, 300-350 μ . diam.; ascis clavulatis breviter crasseque pedicellatis, paraphysatis, 300 \times 60, octosporis; sporidiis ellipsoideo-biconicis, loculo infero vix minore, primo strato mucoso crasso obovolutis dein nudis, 60-65 \times 20-22, hyalinis.

Hab. in ramis emortuis dejectis *Boldoæ* fragrantis prope Talcahuano, Chile Amer. austr.

APIOSPORA Sacc. — Syll. I p. 539, IX p. 659, XI p. 301, XIV p. 534, XVI p. 477, XVII p. 658.

1. *Apiospora Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3861 (1908) p. 121. — Corticola, subepidermica, laxe gregaria; perithe-

ciis minutis, 150 μ . diam., subcarbonaceis, glabris, lenticulari-hemisphæricis; ostiolo minuto carbonaceo; ascis cylindraceutis breviter pedicellatis, apophysatis, apice truncato-rotundatis, 100-120 \times 8-10; contextu indistincto; sporidiis ovoideis bicellularibus, loculo inferiore, seu cauda, triplo minore, hyalinis, monostichis, 14 \times 5-6, prima ætate tunica mucosa tenui obvolutis; loculo sup. 2 guttato, infero uniguttato.

Hab. ad ramulos languidos v. emortuos *Ilicis paraguayensis* (vulgo *Yerba*) Misiones Argentinæ.

2. *Apiospora controversa* Starb., Ascom. Schwed. Chaco-Cordill.-Exp., 3862
Arkiv f. Bot. Bd. V (1905) p. 22, fig. 17 a-c. — Peritheciis densiuscule confertis, rarius nonnullis confluentibus, maculas irregulares formantibus, primitus epidermide plane tectis, denique poro pertuso erumpentibus, lenticularibus, atratis, c. 200-250 μ . diam.; ascis octosporis, oblongatis vel late fusoides, interdum clavulatis, superne obtusis, fere sessilibus, 65-70 \times 19-20; sporidiis distichis vel inordinatim conglobatis, plerumque ovoideo-piriformibus, rarissime ellipsoideis vel ellipsoideo-oblongatis, ad apicem angustioribus septatis, cellula majore globuloidea, minore conica, sepimento sæpissime supra, interdum infra medium sito, endoplasmate grumoso, hyalinis, 15-19 \times 7,5-9; cellula globulosa, 9-11,5 \times 5-7; paraphysibus numerosis, filiformibus, ramosis, guttulatis, hyalinis.

Hab. in foliis vivis paullulum flavido-decoloratis *Pithecolobii* sp. ad Gran Chaco Bolivie. — Nulli speciei adhuc descriptæ affinis videtur; præsertim sporidiis peculiariter septatis prædistincta.

3. *Apiospora myrtincola* Rehm, Ann. Mycol. V (1907) pag. 528. — 3863
Peritheciis dispersis, cortice dealbato primitus tectis, dein semiglobosis, prominentibus, atris, minutissime papillulatis, globosis, contextu parenchymatico fusco, 0,1-0,15 mm. diam.; ascis clavatis, apice rotundatis, crasse tunicatis, 60-65 \times 10-12, 8-sporis; sporidiis ovoideis, infra medium septatis, haud constrictis, hyalinis, 12 \times 5-6, in superiore asci parte 2-infra 1-stichis; paraphysibus filiformibus, 1,5 μ . cr., hyalinis.

Hab. in ramulo Myrtaceæ, Ipamanga pr. Sao Paulo Brasiliæ (USTERI). — Affinis *Ap. Rosenvingei* betulicolæ, sed sporidia paullo minora.

4. *Apiospora luzonensis* P. Henn., Hedwigia XLVII (1908) p. 256. 3864
Peritheciis gregariis parallele seriatis, immersis culmique superficiem elevantibus erumpentibusque, subglobosis, atris, 200 μ . circ.

diam.; ascis clavatis, obtuse rotundatis, 8-sporis, $90-100 \times 20-24$; sporidiis subdistichis, oblonge clavatis, incurvo-attenuatis, $20-24 \times 8-10$, hyalinis, tunicatis, prope basim 1-septatis, subconstrictis.

Hab. in culmis emortuis *Bambusæ* sp., Luzon, prov. Bataan Ins. Philipp. (MERRILL).

5. *Apiospora chilensis* Speg., Fungi Chilenses (1910) pag. 36, cum 3865 icon. — Linearis nigra erumpens; peritheciis dense 1-5 mm. seriatis, globosis, minutis, $200-250 \mu$. diam.; ascis subclavatis aparyphsatis, $110-125 \times 20-22$, octosporis; sporidiis elongato-subnavicularibus, majusculis, $36-38 \times 10-11$, cellula appendiculari minima, hyalinis.

Hab. in culmis siccis *Chusqueæ* Cumingii, Corral, Valdivia, Concepcion, Valparaiso, Chile Amer. austr. — Verisimiliter *Sphaeria apiospora* huc pertinet sed descriptio Montagnei incerta.

MELANOPSAMMA Niessl — Syll. I p. 575, IX p. 682, XI p. 303, XIV p. 539, XVI p. 486, XVII p. 658.

1. *Melanopsamma Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3866 (1908) p. 121. — Peritheciis ligno dealbato-subinfusato immersis, sparsis v. laxe gregariis, parte supera v. ostiolo papillulato, perforato tantum exsertis, subglobosis, 200μ . diam.; ascis clavulatis, filiformi-paraphysatis, apice obtusis, 80×10 , brevissime noduloso-pedicellatis; sporidiis fusoides leniter arcuatulis, utrinque acutiusculis, medio uniseptatis vix constrictis, hyalinis, $25-26 \times 4$, distichis, loculis conoideis, minutissime biguttulatis.

Hab. ad truncos emortuos cariosos *Ilicis* paraguariensis (*Yerba*), San Pedro, Misiones Argentinae.

2. *Melanopsamma* (*Hypopsamma*) *Ribis* Chenant. in Bull. Soc. Sc. 3867 nat. Ouest France (1910) p. 13, t. IV, f. 2. — Stromate irregulariter ellipsoideo nigrescente, ostioliis vix conspicuis muricatis, demum elongatis acutis, crassis aggregatis v. subsparis punctato; peritheciis sphaeroideis, minutis, semper immersis, circ. $150-200 \mu$. diam.; ascis aparyphsatis, cylindraceis, utrinque attenuatis, $110-135 \mu$. longis, apice bifoveolatis; sporidiis ovatis oblongisve, recte v. oblique monostichis, hyalinis, 1-septatis, 2- v. pluriguttulatis, dein 2-3-septatis, non constrictis, hyalinis, loculis 2-guttulatis, $10-20 \mu$. long. et (ex icone) $6-10 \mu$. cr.

Hab. in ramis *Ribis* *Uvæ*-crispæ, Bagatelle, Monterelaxo Gallie. — Cum gen. *Melanopsamma* nil commune habet; auctor vero in litt. nuperius ut formam anomalam *Eutypæ* censet a quo

genere et ascis bifoveolatis et sporidiis ovatis septatis abhorret. Diagnosim retulimus sed verisimiliter de re miscellanea agitur.

3. *Melanopsamma Jaapiana* Kirschst., in Jaap Abh. bot. Prov. 3868
Brandenb. LII (1910) p. 138. — (Nomen nudum).

Hab. ad caudices vetustos Alni pro Triglitz in Germania.

4. *Melanopsamma herpotrichoides* Kirschst., Verh. bot. Ver. Bran- 3869
denb. XLVIII (1906) p. 49. — Peritheciis dense confertis, subiculo
brunneo (raro nullo) insertis, nigris, piriformibus, 200 μ . diam.,
tenui-membranaceis, in ostiolum breve nitidum productis; ascis
cylindræcis, sessilibus, tenuibus, apice truncatis, 80-90 \approx 3-4, octo-
sporis; sporidiis longe 1-seriatis, bicellularibus, hyalinis v. dilu-
tissime viridulis, ellipsoideis, utrinque tenuato-rotundatis, ad se-
ptum plus minus constrictis, 2-4-guttulatis, 7-10 \approx 3; paraphysibus
hyalinis filiformibus, ramosis.

Hab. in interiore corticis putridi Betulæ dejecti, Rathenower
Stadtforst Borussiae.

5. *Melanopsamma valdiviensis* Speg., Fungi Chilenses (1910) p. 59. — 3870
Maculis nullis; peritheciis sparsis v. laxe gregariis ad medium
usque ligno denudato infossis, ostiolo umboniformi crasso quan-
doque subcompresso ornatis, carbonaceis, atris, glabris, 150-200 μ .
diam.; ascis subcylindræcis brevissime pedicellatis, densissime pa-
raphysatis, 100-110 \approx 15-18; sporidiis fusoides submajusculis primo
grosse 6-guttulatis serius medio 1-septatis, constrictulis, hyalinis
v. subchlorinis, 40-45 \approx 7-8.

Hab. ad truncos decorticatos Perseæ Lingue prope Ciudad
de Valdivia, Chile Amer. austr.

6. *Melanopsamma nitida* Kirschst., Verh. bot. Ver. Brandenb. XLVIII 3871
(1906) p. 50. — Peritheciis dense gregariis, nitidis, nigris, globo-
sis, glabris, perexiguis, oculo inermi vix conspicuis, tenuibus, fra-
gilibus, papilla brevi obscuriore præditis; ascis cylindræcis v. te-
reti-clavatis, apice rotundatis, vix pedicellatis, octosporis, 50-60 \approx
3-4; sporidiis oblongis, subclavatis, hyalinis, bicellularibus, intus
vacuis, 1-2-stichis, 6-8 \approx 2; paraphysibus parvis, filiformibus, hya-
linis, ascos multo superantibus.

Hab. ad caudices putres Pini silvestris, Rathenower Stadt-
forst Borussiae.

7. *Melanopsamma hypoxylodes* v. Höhn., Fragm. z. Mykol. III, Sitzb. 3872
k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 121. —
Peritheciis areis ligni nigricantibus insertis, superficialibus, pro
more crebro gregariis, hemisphæricis v. ovoideo-globosis, lata basi

adnatis, glabris, nigris, carbonaceis, nitidis, papilla nitidula v. obsoleta, sæpe leviter concentrice sulcatulis, 900-1000 μ . diam.; ascis cylindraceis, paraphysibus copiosis excedentibus, 1 μ . cr: obvallatis, apice crassiusculis et rotundatis, in stipitem longiusculum sensim tenuatis, octosporis, 150-160 \times 6-7; sporidiis bicellularibus, hyalinis, fusoides, utrinque acutis, medio non constrictis, rectis, 18-32 \times 3-3,5, plerumque 20-24 \times 3, distichis.

Hab. in ligno putrescenti in insulis Samoa Polynesiae (RECHINGER). — Habitus quasi *Hypoxylis*.

8. *Melanopsamma chilensis* Speg., Fungi Chilenses (1910) pag. 58, 8878 cum icon. — Peritheciis matrici denudata cinerescenti sparsis, sub-superficialibus, udis globosis, siccis cupulato-collabescentibus, subcorneis, parvis, nigris, glabris, 250-400 μ . diam.; ascis cylindraceis brevissime pedicellatis denseque paraphysatis, 100-110 \times 10-12, octosporis; sporidiis oblique monostichis ellipsoideo-biconicis, 1-septatis, constrictis, hyalinis, mediocribus, 20 \times 8-9.

Hab. in ramis emortuis et siccis Proustiae pungentis, in colles prope Batuco Chile Amer. austr.

ERIOSPHAERIA Sacc. — Syll. I p. 597, IX p. 696, XI p. 307, XVI p. 490, XVII p. 659.

1. *Eriosphaeria erysiphoides* Rehm, Contr. myc. Fl. Hung., Novenyt. 8874 Közlemén. (1905) p. 1. — Peritheciis gregariis, maculas nigras formantibus, sessilibus, globosis, poro haud conspicuo pertusis, fuscis, siccis nigris; contextu parenchymatico fusco, setis plurimis rectis, acutis, fuscis, 45 \times 4-5, obsessis, 90-120 μ . diam.; ascis fusiformibus, sessilibus, 30 \times 4, 8-sporis oblongis, utrinque obtusis, rectis vel curvatis, medio septatis, utraque cellula 1-guttulata, hyalinis, 7-9 \times 1,5, distichis; paraphysibus nullis.

Hab. in ligno Populi, Berencsfalu, prope Selmeczbánya Hungariae (KMET). — *Sphaeria exilis* Alb. et Schw. similis, quæ autem quoad ascos et sporidia plane ignota et quæ, teste Schröt., non est *Cælosphaeria exilis* (Fuck.) Sacc.

KIRSCHSTEINIA Syd. Ann. Mycol. IV (1906) p. 455 (Etym. a cl. W. KIRSCHSTEIN, mycologo borussico), *Bertiella* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 51, non Sacc. — Perithecia discreta, superficialia, glabra, carbonacea, ovoideo-globosa, ostiolo brevi crasso. Asci fusoides-clavati, polyspori, paraphysati. Spo-

ridia ellipsoideo-oblonga, 2-4-guttulata, dein 1-septata, hyalina. — A genere *Bertia* præceteris ascis polysporis distinguitur.

1. *Kirschsteinia polyspora* (Kirschst.) Syd. l. c., *Bertiella polyspora* 3875 Kirschst., l. c. p. 51, cum icon. — Peritheciis superficialibus, nigris, rugosis, glabris, globoso-ovoides, obtuse papillatis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. cr., basi adnatis, hyphulisque brunneis septatis cinctis; ascis fusoides-clavatis, subsessilibus, $90 \approx 20$, polysporis; sporidiis ellipsoideo-oblongis, rectis v. curvulis, hyalinis, 2-4-guttulatis, dein 1-septatis, non constrictis, $9-12 \approx 2-3$; paraphysibus nullis.

Hab. in ramis decorticatis putrescentibus quercinis, Rathe-nower Stadtforst Borussiae.

VALETONIELLA v. Höhn. Fragm. Myk. IX (1909) p. 39 (Etym. a cl. THEOD. VALETON herbarii Buitenzorgensis direttore). — Perithecia superficialia, membranacea, nigricantia, ostiolo circumcirca setis apice ramosis ornato. Asci non v. obsolete paraphysati, octospori. Sporidia oblonga, hyalina, demum bicellularia. — Ab *Eriosphæria* imprimis setis apice ramosis dignoscendum genus.

1. *Valetoniella crucipila* v. Höhn. l. c. p. 40. — Peritheciis gregariis, 3876 subglobosis, 180-220 μ . diam., papillatis, papilla obscuriore 50-70 \approx 30-35, ostiolo 8-10 μ . diam.; contextu e cellulis polygoniis, 12-16 μ . diam., atro-brunneis formato; setulis 15-20, rigidulis, continuis, atro-brunneis, 44-70 \approx 6-8, prope apicem in ramos subquaternos, 8 μ . cr., patentes divisas; ascis obsolete paraphysatis, clavatis, teneris, 30-36 \approx 7-9; sporidiis distichis, ellipsoideo-oblongis, ad septum non constrictis, 8-9 \approx 3, rarius 13 \approx 4, tunica interdum leviter longitrorsum 3-4-striatula.

Hab. ad corticem Albizziae moluccanæ (?) in horto botanico Buitenzorg Javæ.

LIZONIELLA P. Henn. — Syll. XVII p. 661.

1. *Lizoniella Cupaniae* (Rehm) Sacc. et Trott., *Lizonia Cupaniae* Rehm, 3877 Ann. Mycol. V (1907) p. 527. — Maculis nullis; peritheciis hypophyllis, in soros orbiculares 2,5 mm. diam., centro sæpe nudis et albidulis arcte congregatis, sessilibus, globulosis, vix papillulatis, poro pertusis; contextu parenchymatico membranaceo, glabris, fuscis, 90-100 μ . diam.; ascis fusiformibus, sessilibus, 60 \approx 12, apice rotundatis, 8-sporis; sporidiis fusiformibus, utrinque subrotundatis, rectis medio septatis, haud constrictis, hyalinis, 25 \approx 3,5-4, 2-3-stichis; paraphysibus 3 μ . cr., septatis, hyalinis.

Hab. ad folia Cupaniæ, Sao Leopoldo, Rio Grande do Sul
Brasilæ (RICK S. J.).

2. *Lizoniella leguminis* (Rehm) Sacc. et Trott., *Lizonia leguminis* 3878
Rehm in Broteria V (1906) p. 226. — Peritheciis late arcuatis congestis, sessilibus, globulosis, poro minutissimo pertusis, atris, glabris, 200 μ . diam., contextu parenchymatico fusco, membranaceo; ascis fusiformibus, 40-42 \times 10, tetrasporis, apophysatis; sporidiis oblongo-fusoideis, utrinque rotundatis, medio septatis, vix constrictis, hyalinis, 18 \times 3-4, distichis.

Hab. in superficie externa leguminis speciei indet. in Brasilia.
— *Liz. Uleanæ* proxima videtur.

3. *Lizoniella Syzygii* (Rac.) Sacc. et Trott., *Lizonia Syzygii* Racibor- 3879
ski, Bull. Ac. Sc. Cracovie (1909) p. 387. — Maculis hypophyllis, sparsis, subrotundis, nigricantibus 2-3,5 mm. lat., stromatoideis; peritheciis globulosis minutissimis, nigris, concentricè dense seriatis, basi lata sessilibus, hyphis myceliis penetrantibus, brevi-cellularibus, brunneis basi auctis, globosis, 120 μ . diam., ostiolo impresso, minuto; ascis apophysatis, tereti-clavatis, 68-82 \times 16, octosporis; sporidiis breve fusoideis, 30 \times 4-5, rectis, levibus, utrinque acutis, hyalinis, medio non constrictis, bicellularibus.

Hab. in foliis Syzygii sp., Salak et Megamendong pr. Buitenzorg Javæ.

4. *Lizoniella fructigena* Syd., Ann. Mycol. V (1907) p. 357. — Pe- 3880
ritheciis in superficie fructuum dense dispositis et sæpe eos omnino obtegentibus, erumpenti-superficialibus, atris, subglobosis, rugulosis, vel papillatis, ca. 125-200 μ . diam., contextu parenchymatico olivaceo-fusco; ascis cylindraceis, sessilibus, rectis vel sæpius curvulis, 65-90 \times 8-14, octosporis; sporidiis monostichis, ovatis v. ellipsoideis, utrinque rotundatis, medio 1-septatis, non constrictis, hyalinis, 11-18 \times 7-9.

Hab. ad fructus Eugeniæ spec. Prov. Sao Paulo, Sao Francisco dos Campos Brasilæ.

5. *Lizoniella Uleana* (Sacc. et Syd.) Sacc. et Trott., *Lizonia Uleana* 3881
Sacc. et Syd. — Syll. XVI, p. 485. — Var. *Tournefortiæ* Rehm, Ann. Mycol. V (1907) p. 528. — Peritheciis 2-20 dense confertis, in maculis orbicularibus, dilute ochraceis, 0,5 mm. diam. insidentibus; ascis parte superiore ovalibus vel clavatis, rotundatis, plerumque in stipitem brevem contractis; sporidiis oblongis, utrinque rotundatis, medio septatis et subconstrictis, guttulis minutissimis

- repletis, hyalinis; paraphysibus interdum dichotomis, septatis, 1,5 μ ., ad apicem usque 2 μ . latis.

Hab. in foliis vivis Tournefortiæ, Villa Marianna, Sao Paulo Brasiliæ (USTERI).

6. *Lizoniella stromatica* (Rehm) Sacc. et Trott. *Lizonia stromatica* 8882
Rehm, Ann. Mycol. VI (1908) p. 323. — Peritheciis in pagina superiore foliorum primitus gregarie innatis, dein in maculis circumscriptas aterrimas, suborbiculares, 3-4 mm. diam. arctissime congregatis, prominentibus, sphæroideis, poro pertusis, crasse subcarbonaceis, 60-70 μ . diam.; ascis fusiformi-clavatis, 60-65 \times 12, octosporis; sporidiis linearibus, rectis, utrinque obtusis, medio septatis, haud constrictis, utraque cellula prope septum 1-guttulata, hyalinis, 2-3-seriatis, 25-30 \times 4-4,5; paraphysibus nullis.

Hab. in foliis emortuis Saxifragæ? in Alpe Arlbergensi Algoviæ (C. ARNOLD). — Habitus hinc *Sphaerellæ*, illinc *Euryachoræ*.

7. *Lizoniella Ætoxici* (Speg.) Sacc. et Trott., *Lizonia Ætoxici* Speg., 8883
Fungi Chilenses (1910) p. 59, cum icon. — Maculis nullis; peritheciis innato-superficialibus lenticularibus parvis, atris, nitidulis, coriaceis, astomis (?), 200-250 μ . diam.; ascis subcylindræis brevissimè pedicellatis subparaphysatis, 65-75 \times 7-8, octosporis; sporidiis oblanceolatis v. cylindræo-subnavicularibus, medio 1-septatis hyalinis subsparsis, 14-16 \times 2,5, monostichis v. distichis.

Hab. ad folia dejecta subputrescentia Ætoxici punctati, Cerro Caracol de Concepcion, Chile Amer. austr.

8. *Lizoniella Hypnorum* (Ferd. et Winge) Sacc. et Trott., *Lizonia* 8884
Hypnorum Ferdinands. et Winge, Bot. Tidsskr. XXVIII (1907) p. 254, f. 3. — Peritheciis epiphyllis, globosis, subastomis v. apice truncato-conoideis, hyphis a basi prodeuntibus, fuliginèis 2,5-4 μ . cr., in folio repentibus affixis, 50-60 μ . diam., nigris; ascis rhomboideo-saccatis v. crasse clavatis, versiformibus, 37-44 \times 12-18, tetra-octosporis; sporidiis ovato-ellipsoideis, 1-septatis, sæpe inæqualateralibus loculoque superiori majori, 11-16 \times 5-6,5, hyalinis.

Hab. ad folia viva Hypni (Stereodontis) cupressiformis prope Borry Jutlandiæ.

OTTHIELLA Sacc. — Syll. I p. 739, XVI p. 1135, XVII p. 662.

1. *Othiella collabens* Speg., An. Mus. Nac. Buenos Aires t. XIX 8885
(1909) p. 358. — Maculis nullis; peritheciis parvulis 100-150 μ . diam., dense constipatis, subpedicellatis, in sicco cupulato-collabescens, atris, glabris; ascis e cylindræo subclavulatis, 60 \times 8-

10, paraphysatis, octosporis; sporidiis subellipsoideis 1-septatis hyalinis 12-14 \times 5-6, loculis subæquilongis sæpius minute biguttulatis.

Hab. in disco ramorum excæsorum Pruni armeniæ in hortis prope Tucuman Rep. Argentina Amer. austr.

2. *Otthiella Schiffneri* v. Höhnelt, *Ergeb. Bot. Exp. Südbros.* 1901, 3886 *Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII* (1907) pag. 25. — Peritheciis coriaceo-carbonaceis, asperulis, pachydermicis, ovoideis, 250-350 μ . diam, basi stipitiformi 400-450 \times 250-300 suffultis, stromateque irregulariter verruciformi carbonaceo erumpenti-superficiali confertim insertis, soros 2-4, aut ad foliorum nervos usque ad 10 mm. long. formantibus; ascis filiformi-paraphysatis, sessilibus, clavatis, 70-90 \times 9-10, octosporis; sporidiis subdistichis, hyalinis, bicellularibus, fusoides, rectiusculis, rarius curvulis, utrinque acutis, medio non constrictis, tenuiter tunicatis, 22-25 \times 5-5,5.

Hab. in pag. inf. foliorum arboris ignotæ, pr. Sao Paulo Brasilie (SCHIFFNER).

3. *Otthiella Fairmani* Saccardo, *Microm. Amer. Novi, Journ. of Mycol.* v. XII (1906) pag. 48. — Peritheciis in acervulos minulos, suborbiculares, 1 mm. diam., erumpenti-superficialibus, in quoque acervulo paucis (5-7), globosis, subinde paullulum connatis, non v. obtuse papillatis, nigris, glabris, 400 μ . diam.; ascis tereti-elongatis, utrinque tenuatis, subsessilibus, 110-130 \times 13-15, octosporis; paraphysibus filiformibus, copiosis; sporidiis distichis, oblongo-fusoides, curvulis, utrinque acutulis, medio septatis et denique constrictulis, 30-32 \times 5,5-6, hyalinis v. dilutissime ochraceis, articulo super. sæpe paullo crassiore.

Hab. ad cortices dejectos in silvis pr. Lyndonville, New York Amer. bor. (FAIRMAN). — A ceteris generis speciebus omnino diversa.

GIBBERA Fr. — *Syll.* I p. 599, IX p. 306, XIV p. 542, XVI p. 491, XVII p. 813.

1. *Gibbera riograndensis* Rehm, *Broteria* V (1906) p. 226. — Peritheciis in greges superficiales 2-10 mm. latos, effusos arcte confertis, globulosis, papillula minutissima demum pertusa, nigro-fusculis, submembranaceis, 0,3-0,5 mm. diam., imprimis basi hyphis longis simplicibus, septatis, fuscis, 3-6 μ . cr., vestitis usque stromateæ coacervatis; ascis clavatis, apice rotundatis, 100 \times 10, octosporis; sporidiis subclavatis, utrinque obtusis, rectis, 2-cellularibus, cellula superiore interdum brevior, ad septum non con-

strictis, dilute fuscidulis, $18-20 \times 5$, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad corticem, Rio Grande do Sul Brasilæ (J. RICK).

Sect. 5. Phæodidymæ.

PHÆOSPHÆRELLA Karst. — Syll. IX p. 723, XI p. 312, XVI p. 498, XVII p. 675.

1. *Phæosphærella scirpicola* Earle, Bull. of the N. York Bot. Gard. 3889 (1904) p. 293. — Peritheciis sparsis, epiphyllis, subsuperficialibus, minutis, nigris, membranaceis, 250 μ . diam.; ascis ellipsoideis, $40-50 \times 18$, aparaphysatis; sporidiis fasciculatis, cylindraceis, medio 1-septatis, non constrictis, initio hyalinis, dein brunneis, $30-35 \times 4$, loculis 4-guttulatis.

Hab. in foliis arescendo dealbatis *Scirpi* sp. pr. Stanford University, California (C. F. BAKER).

2. *Phæosphærella? donacicola* Speg., An. Mus. Nac. Buenos Aires 3890 t. XIX (1909) p. 370. — Matricem totam sordide infuscans; peritheciis minutis epidermide velatis confertis vix papillulato-ostiolatis, ex hemisphærico lenticularibus 150-180 μ . diam.; ascis cylindraceis aparaphysatis, octosporis $55-60 \times 4-5$; sporidiis rectis v. oblique monostichis elongato-ellipsoideis, $8-10 \times 3-3,5$, medio septato-constrictulis, pallide fusco-olivaceis, loculis subæqualibus, 1-guttulatis.

Hab. ad culmos putrescentes *Arundinis Donacis*, Lezama prope Buenos Aires Rep. Argentina Amer. austr.

3. *Phæosphærella alpestris* (Friederich) Sacc. et Trott. *Sphærothecium* 3891 *alpestre* Friederich, Beitr. zur Anat. d. Silikatflechten Jnaug.-Dissert., Stuttgart (1904) pag. 31. — Mycelio epiphytico effuso e cellulis amplis globosis brunneis formato, copioso et irregulariter ramoso; peritheciis rarioribus, globosis, extus brunneis, contextu tenui; ascis paucis jodi ope immutatis, octosporis; sporidiis ellipsoideis, 1-septatis, non constrictis, brunneis, 10×7 .

Hab. in thallo *Usneæ* nec non in cortice præpinquo *Pini Cembrae*, Karrerpass Tirolæ.

4. *Phæosphærella Senniana* Sacc., in Ann. Mycol. XII (1910) p. 337. 3892 — Peritheciis plerumque epiphyllis, nunc maculas subcirculares brunneolas occupantibus, nunc æque orbiformiter dispositis sed sine maculis, sæpius circinato-gregariis, punctiformibus perexiguis, 60-

90 μ . diam., lenticularibus, prominulis, nigris, calvis, ostiolo sub-circulari, 12-14 μ . diam. pertusis; contextu obsolete parenchymatico, fuligineo; subiculo omnino nullo; ascis aparaphysatis, oblongo-fusoides, utrinque obtusis, subsessilibus, 28-30 \times 8,5-10, octosporis; sporidiis distichis, oblongis, utrinque præcipue apice obtusis, medio 1-septatis, non constrictis, 11-12 \times 4-4,5, atro-olivaceis.

Hab. in foliis morientibus *Proteæ abyssinicæ*, Addi Nefas *Erythrææ* (Legit LAUR. SENNI, dedit prof. J. H. MATTER).

TICHTOTHECIUM Flot. — Syll. IX p. 723, XIV p. 551, XVI p. 498, XVII p. 676.

1. **Tichothecium Latzelii** Keissl., Oesterr. botan. Zeitschr. (1909) p. 277. 3893

— Peritheciis immersis, apice rotundato ostiolato prominulis, depressoglobosis, atris, parvis, c. 200-300 μ . diam.; ascis cylindrico-clavatis, non stipitatis, 8-sporis, c. 45-55 \times 12-15, paraphysibus nullis; sporidiis fusiformibus rectis, uniseptatis, brunneolis, 2-4-guttulatis, oblique 2-seriatis, c. 12-15 \times 6.

Hab. in thallo *Collematis pulposi* prope Forte Lorenzo ad Ragusam Dalmatiæ (A. LATZEL). — Hymenium jodi ope immutatum.

2. **Tichothecium collemarium** (Linds.) Zopf in Hedw. (1896) p. 324, 3894

Microthelia collemaria Linds. Lichenicol. Micro-fungi, pag. 555, t. XXIV, f. 22. — Peritheciis minutis, nigris; ascis saccato-clavatis, apice rotundatis basi breviter tenuatis, copiose filiformi-paraphysatis, 90-100 \times 30-40, polysporis; sporidiis conglobato-poly-stichis, oblongo-ellipsoideis 1-septatis, non constrictis, utrinque rotundatis, loculis æqualibus, brunneis, 10-12 \times 5-5,5.

Hab. in thallo *Collematis muscicoli*, Cleveland, Yorkshire Britannicæ (MUDD) et *Collematis melæni*, Otago in Nova Zelandia (LINDSAY).

3. **Tichothecium stigma** Körb. — Syll. IX, p. 724. — Var. *obtusum* 3895

sporum Bagl. et Carestia, in Atti Soc. crittog. ital. II (1879) p. 354, tab. 5, f. 80. — Ascis late clavatis, octosporis; sporidiis minoribus, ellipsoideis, utrinque sat obtusatis, bilocularibus, fuscescentibus, 12-13 \times 6.

Hab. in thallo *Opegraphæ zonatæ* al *Sacco* Riva Valsesia Ital. bor. (Ab. CARESTIA).

DIDYMOSPHERIA Fuck. — Syll. I p. 701, IX p. 728, XI p. 312, XIV p. 551, XVI p. 498, XVII p. 676.

1. *Didymosphæria Fumanæ* Hollós, Ann. Mus. Nat. Hung. V (1907) 3896 pag. 455. — Peritheciis gregariis, superficialibus, globosis nigris, 180-220 μ . diam., ostiolo conicis; ascis clavatis, apice rotundatis, breve stipitatis, 8-sporis, 64-74 \times 14-18; paraphysibus filiformibus septatis; sporidiis distichis, oblongis, medio 1-septatis, constrictis, pluriguttulatis, olivaceis, 20-24 \times 7-8.

Hab. in ramulis decorticatis *Helianthemum Fumanæ* prope Kecskemét Hungariæ.

2. *Didymosphæria araucana* (Speg.) Sacc. et Trott., *Microthelia araucana* Speg., Fungi Chilenses (1910) p. 71. — Peritheciis sparsis minutis lenticularibus, cortice innatis epidermide clypeatim nigricata tectis, subcarbonaceis, 200-250 μ . diam., ostiolo vix prominenti; ascis cylindræis modice pedicellatis densissime paraphysatis, octosporis, 110-120 \times 12-14; sporidiis ellipsoideis, fuligineis, medio 1-septatis, non vel vix constrictulis, utrinque obtusis, 16-18 \times 8-9.

Hab. in ramis siccis *Rubi sancti*, Bahia de Corral, Chile Amer. austr.

3. *Didymosphæria ludens* (Schulz.) Sacc. et Trav. — Syll. XIX p. 599 3898 — *Sphæria ludens* Schulz. v. Mügg., in Verh. zool.-bot. Gesell. Wien (1871) p. 1253, t. XIII, f. 34. — Peritheciis gregariis, sub-superficialibus globoso-depressis, epapillatis, nigris; ascis cylindræis apice rotundatis, breviuscule stipitatis, paraphysibus parvis subinde ramulosis obvallatis, 8-sporis; sporidiis monostichis, crebris, ellipsoideo-oblongis, utrinque rotundatis, constricto-1-septatis, brunneis, 14 \times 4.

Hab. in ramis decorticatis *Cydoniæ vulgaris* in Hungaria.

4. *Didymosphæria ? eugeniicola* Speg., Fungi Chilenses (1910) p. 68. 3899 — Peritheciis cortice innatis, epidermide tectis, sparsis v. subseriatis, subcarbonaceis, minutis, atris, ostiolo impresso pertusis, 150-180 μ . diam.; ascis e cylindræo subclavatis, brevissime pedicellatis, parce paraphysatis, octosporis, 100-120 \times 30; sporidiis ellipsoideo-didymis, submajusculis, opacis fuligineis, 26-34 \times 14.

Hab. in ramulis siccis *Eugeniæ obtusæ*, Cerro Caracol de Concepcion, Chile, Amer. austr.

5. *Didymosphæria Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3900 (1908) p. 122. — Ramulicola; peritheciis minutis, sparsis, epidermide velatis, 90-100 μ . diam., coriacellis, ostiolo vix papillulato epidermidem perforante; ascis cylindræis breviter cuneato-pedicellatis, longius paraphysatis, apice obtuse rotundatis, 50-60 \times 5-6,

octosporis; sporidiis minutis subellipsoideis, didymis, modice constrictis, fusco-fumosis, monostichis, utrinque obtusis, $8-9 \approx 3,5-4$.

Hab. in ramulis languidis v. emortuis Ilicis paraguayensis (*Yerba Mate*) in dumetis prope Campo das Cuías, Misiones Argentinae. — Cum *D. Sellæ* non comparanda.

6. *Didymosphæria Ribis* Hazsl., Sphær. Hung. pag. 123, tab. VIII, 8901 fig. 32 (in textu ut var. *D. epidermidis*). — Peritheciis globosis, parum deplanatis, ostiolo rotundo perforatis, aggregatis, epidermidem papillatim elevantibus, demum apice perforantibus; ascis cylindricis stipitatis, stipite 4μ . longo præditis, paraphysatis; sporidiis ovalibus, uniseriatis, $8-12 \approx 3,5-5$.

Hab. in ramis Ribis alpini in Hungaria. — A typo, teste auctore, recedit habitu, paraphysibus simplicibus et dimensionibus.

7. *Didymosphæria ? sordidissima* Speg., An. Mus. Nac. Buenos Aires 8902 t. XIX (1909) p. 371. — Peritheciis ligno late sordideque infuscato immersis, globulosis v. latere compressulis, $100-150 \mu$. diam., ostiolo superficiem matricis attingente, non v. vix exerto armatis; ascis cylindræis breviuscule pedicellatis $100 \approx 6$, paraphysibus filiformibus longioribus obvallatis, octosporis; sporidiis didymis ellipsoideis, $12 \approx 5$, medio 1-septato-constrictulis, fuligineis, loculis subæquatibus sæpius grosse 1-2-guttulatis.

Hab. ad ramos decorticatos putrescentes Solani verbascifolii, Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

8. *Didymosphæria coffeicola* Speg., An. Mus. Nac. Buen. Air. t. XIX 8903 (1909) pag. 370. — Matrice immutata; peritheciis sparsis minute innato-erumpentibus subcarbonaceis, ostiolo vix papillato coronatis, e lenticulari subhemisphæricis, 120μ . diam.; ascis subclavulatis, 4-8-sporis, $60 \approx 8-10$, paraphysibus filiformibus longioribus cinctis; sporidiis didymis, distichis, ellipsoideis-biconoideis, sæpius leniter inæquilateralibus, $10-14 \approx 3-4$, medio 1-septato-constrictulis, primo hyalinis dein obscure fuligineis, loculis subæqualibus diblastis v. grosse biguttulatis.

Hab. ad ramulos dejectos putrescentes Coffeæ arabicæ, Sao Paulo, Brasilia Amer. austr. (C. GIROLA).

9. *Didymosphæria massarioides* Sacc. et Brun. — Syll. IX, p. 729. — 8904 var. *major* Potebnia, Myc. St. in Ann. Myc. V (1907) p. 14, f. 24 (ex errore « minor ») et Trav. Soc. Nat. Univ. Kharkow XXXVIII (1907). — Peritheciis $0,7-0,8$ mm. cr., collo $150 \approx 17-24$; sporidiis $30-35 \approx 10-14$.

Hab. in ramis siccis *Lycii barbari* socio *Camarosporio Lycii* et *Sporodesmio Lycii*, Kharkow Rossia. — An eadem ac *Didymosphæria Lycii* Sacc.?

10. *Didymosphæria victoriensis* Sacc., Not. Myc. VI, Ann. myc. III 3905 (1905) p. 510. — Peritheciis gregariis, subcutaneis, globulosis, nigricantibus, crassiuscule membranaceis, $\frac{1}{3}$ mm. diam., ostiolo obtuso brevissimo parce erumpenti; contextu e cellulis 8-10 μ . diam., rufo-fuligineis formato; ascis cylindraceis, breve noduloso-stipitatis, 8-sporis, apice rotundatis, 85-95 \times 15-16, paraphysibus crassiuscule filiformibus, ascos non excedentibus, parvis; sporidiis ovoideo-oblongis, distichis v. oblique monostichis, medio constricto-1-septatis, 19-22 \times 9, utrinque rotundatis, loculo sup. interdum paullo crassiore, olivaceo-fuligineis.

Hab. in caulibus emortuis *Artemisiæ camphoratae*, Vitorio (Treviso) Ital. bor. — Affinis *D. permutatae*, *D. pulchellæ* etc.

11. *Didymosphæria perexigua* Sacc., Notæ myc. VIII, Ann. Myc. 3906 v. IV (1906) p. 491, tab. X, fig. 2. — Peritheciis gregariis punctiformibus, lenticularibus, subcutaneis, 110-130 μ . diam., ostiolo brevissimo vix 20 μ . diam. erumpente; contextu laxo celluloso pallide fuligineo, circa ostiolum densiore, saturatiore; ascis cylindraceo-obclavatis, brevissime stipitatis, deorsum incrassatis, sursum obtuse tenuatis, 35-40 \times 7-9, octosporis; paraphysibus filiformibus inæqualibus, ascos non superantibus, guttulatis; sporidiis distichis, sursum sæpius monostichis, oblongis, utrinque rotundatis, medio 1-septatis, leviter constrictis, 10-12 \times 4-4.5, chlorinis dein olivaceis, cellula superiore paullo crassiore.

Hab. in caulibus emortuis *Scabiosæ Succisæ*, socio *Fusicladio consorte*, cujus est forte status ascophorus, Meudon Gallia. (LUDWIG, comm. P. HARIOT).

12. *Didymosphæria ? pusilla* Speg., Fungi Chilenses (1910) p. 67. — 3907 Maculis nullis; peritheciis hypophyllis parenchymate innatis, epidermide velatis, lenticularibus, pusillis, vix prominulis, 150 μ . diam., astomis?, subcarbonaceis; ascis cylindraceis breviter pedicellatis, octosporis, paraphysatis 60-80 \times 8-9; sporidiis mono- v. distichis, fusoides subnavicularibus, parvis, fumosis, primo continuis dein 1-septatis, non constrictis, 13-15 \times 3-4.

Hab. in foliis siccis *Guevinæ Avellanæ* in silvis prope Cerro Caracol de Concepcion, Chile Amer. austr.

13. *Didymosphæria ? Boldoæ* Speg., Fungi Chilenses (1910) p. 66. — 3908 Peritheciis sparsis v. laxo gregariis epidermide sublevata tectis

sublenticularibus minutis, coriacellis, nigris, ostiolo impresso-pertusis 150-200 μ . diam.; ascis e cylindraceo subclavulatis, apapophysatis, octosporis, 120 \times 20-22; sporidiis elliptico- v. ovato-didymis, medioeribus, subconstrictis, subopacis, fuligineis, 21 \times 12.

Hab. in ramis emortuis v. subputrescentibus Boldoæ fragrantis prope Talcahuano, Chile Amer. austr. — Ob sporidiorum stratum mucosum nullum generi *Massariellæ* non adscribenda species videtur.

14. *Didymosphæria Wallrothii* (Hepp) Sacc. et Trott., *Massariopsis* 3909

Wallrothii (Hepp) Rehm, Ann. Mycol. IV (1906) p. 270, *Pyrenula Wallrothii* Hepp., Lich. exs. n. 709 et Abbild. t. 81, f. 709, *Microthelia betulina* Lahm ap. Körb. Par. lich. p. 397, *Verrucaria micula* f. *furfuracea* Garov. Tent. dispos. lich. I, p. 79. — Peritheciis cortice innatis et maculas nigricantes gignentibus, initio punctiformibus, dein subliberis, globosis, poro pertusis; ascis octosporis; sporidiis bilocularibus utrinque rotundatis, medio constrictis, 13-23 \times 4-7.

Hab. in cortice Betulæ in Helvetia (HEPP) et Germania (LAHM).

15. *Didymosphæria conoidea* Niessl — Syll. I, p. 702. — f. *conigena* 3910

Bianchi, Micol. prov. Mantova, Atti R. Ist. bot. Pavia ser. II, v. IX, p. 301. — Ascis 55-60 \times 7-8; sporidiis medio valde constrictis, pallide fuscis, 10-12 \times 5, paraphysibus elongatisasco longioribus.

Hab. in strobilis Abietis pr. Mantova Ital. bor. — Præcipue ascis brevioribus, sporidiis magis constrictis, matrice etc. a typo satis distincta. — Var. *major* Starb. Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 22. — Peritheciis plane immersis, sphæroideis, ostiolo cylindraceo-conico, rugosiusculo epidermidem perrumpentibus; ascis octosporis, cylindraceis, 82,5-90 \times 6-7; sporidiis plerumque imbricatim monostichis, majoribus, 9-15 \times 6-6,5; paraphysibus numerosis, filiformibus, sursum ramulosis, ramulis flexuosis vel sæpe tortuosis, hyalinis. — In caulibus emortuis, Prov. Jujuy, Quinta, pr. Laguna de la Brea, Argentina. — A typo sporidiis majoribus, a *D. conoidella* Sacc. et Berl. sporidiis monostichis, a *D. subconoidea* Bomm. Rouss. Sacc. paraphysibus non septatis diversa; forsitan specificè distinguenda.

6. *Didymosphæria Astrocaryi* v. Höhn. Fragm. z. Mykol. X (1910) 3911

p. 42. — Peritheciis laxè sparsis, epiphyllis, hypodermio innatis, globosis, sursum subdepressis, 300-360 μ . diam., ostiolo conico, so-

lido 120 μ . alto erumpentibus, contextu brunneo e cellulis polygoniis 5-8 μ . diam. conflato; ascis clavatis, apice rotundatis, 85 \approx 12, in pedicellum 15 μ . long., tenuatis, paraphysibus copiosis filiformibus una cum ascis muco immersis, octosporis; sporidiis distichis, bicellularibus, cinereo-brunneis violaceo-tinctis, non v. vix constrictis, oblongo-cylindraceis utrinque obtusis, 11-16 \approx 4-4,5.

Hab. in foliis *Astrocaryi vulgaris* in Guiana, frequens (LEPRIEUR).

17. *Didymosphæria scabrispora* v. Höhn., *Fragm. z. Mykol.* IX (1909) 3912 p. 41. — Peritheciis sparsis, ad 140 μ . matrice supra atrata immersis, 1,5-2 mm. long., 0,3-0,7 mm. lat. (majoribus), oblongis, depressis, ostiolo applanato, oblongo, non emergente, contextu membranaceo-molli, parum evoluto, brunneolo, e cellulis angustis conflato; ascis cylindraceis, breviter pedicellatis, apice rotundatis, tenui-tunicatis, octosporis, 175-200 \approx 9-9,5; paraphysibus copiosis, 1 μ . cr., sursum ramoso-connexis, muco obductis; sporidiis monostichis, oblongis utrinque obtusule tenuatis, rectis, bicellularibus ad septum non v. vix constrictis, umbrinis, 26-30 \approx 7-8, tunica duplici præditis, tenuiter reticulato-spinulosis.

Hab. in culmis tenuioribus *Bambusæ* in horto botanico Buitenzorg Javæ.

18. *Didymosphæria bambusicola* v. Höhn., *Ergeb. Bot. Exped. Südbras.* 3913 1901, *Denk. k. Ak. d. Wiss. Wien*, Bd. LXXXIII (1907) p. 25. — Peritheciis gregarie sparsis, epidermide non atrata tectis, nigro-brunneis, firmæ membranaceis, globulosis, supra late conoideis, 400-450 μ . diam.; ascis cylindraceis 65-70 \approx 4-5,5; paraphysibus copiosis, filiformibus, sursum reticulato-connexis, dein deliquescens; sporidiis monostichis, brunneis, bicellularibus, levibus, oblongis, utrinque sæpius obtuse conico-tenuatis, medio leviter constrictis, 8-12 \approx 3-4, cellula sup. pro more paullo crassiore.

Hab. in culmis *Bambusæ*, Sao Paulo Brasiliæ.

19. *Didymosphæria saccharicola* Speg., *An. Mus. Nac. Buenos Aires* 3914 t. XIX (1909) p. 370. — Matrice non v. vix infuscata; peritheciis parvis laxè gregariis vix ostiolato-papillatis, 150-180 μ . diam.; ascis cylindraceis breviuscule pedicellatis, octosporis, 110-120 \approx 8-10, paraphysibus filiformibus sublongioribus densis obvallatis; sporidiis monostichis, elongato-ellipsoideis, medio 1-septatis, non vel vix constrictis, pallide fuligineis, rectis v. obsoletissime subnavicularibus, 15 \approx 5, loculis æqualibus 1-guttulatis.

Hab. ad culmos dejectos putrescentes Sacchari officinarum prope Ledesma, Jujuy Rep. Argentina Amer. austr.

20. *Didymosphæria Werthiana* P. Henn., Deutsche Südpolar-Exped. 3915 Bd. VIII (1906) pag. 10, tab. II, f. 6 *a-b* (extr.). — Peritheciis amphigenis sparsis v. gregariis, innato-tectis, ostiolo erumpentibus, atro-membranaceis, subglobosis, 250-280 μ . diam.; ascis late clavatis, apice tunicatis, obtuse rotundatis, basi attenuatis, sæpe stipitato-curvatis, octosporis, 80-120 \times 25-40; paraphysibus filiformibus, hyalinis; sporidiis subdistichis v. conglobatis, sæpe crasse hyalino-mucosis, ellipsoideis v. subovoideis, rectis v. subcurvis, primo hyalinis, 2-guttatis, dein fusco-brunneis, medio 1-septatis, constrictis, 25-30 \times 10-14.

Hab. in foliis Poæ Cookii in Possession ex insulis Crozet in Polo austr. (Doct. E. WERTH). — Species prædistinguenda.

21. *Didymosphæria Puyæ* (Speg.) Sacc. et Trott., *Microthelia Puyæ* 3916 Speg., Fungi Chilenses (1910) p. 71, c. ic. — Maculis nullis; peritheciis epiphyllis, globosis, 200-250 μ . diam., matrice omnino infossis, ostiolo vix papillato superficiem epidermidis attingente, areola pusilla nigra cincto, coronatis; ascis cylindraceis, breviter pedicellatis, parce paraphysatis, octosporis, 140-160 \times 14-15; sporidiis submediocribus, pulchre fuligineis, tunica mucosa crassa vestitis, 20-22 \times 9-10.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

Subgen. *Endococcus* Nyl. Species lichenicolæ [Cfr. Syll. XVII, p. 681].

22. *Didymosphæria stictaria* (Linds.) Sacc. et Trott., *Microthelia stictaria* Linds., Lichenic. Micro-fungi p. 541, t. XXIV, f. 4-5. — Peritheciis minutis, nigris, superficialibus et facile secedentibus; ascis crasse clavatis, deorsum tenuatis, jodo violascentibus, minutis; sporidiis laxè distichis, constricto-didymis, loculo superiore lenissime crassiore, ex olivaceo brunneis, minutis, 8 \times 3,5.

Hab. in thallo Stictæ Freycinetii Campbell's Island (HOOKER). — Ab affini *D. rugulosaria* sporidiis minoribus recedit.

23. *Didymosphæria perrugosaria* (Linds.) Sacc. et Trott., *Microthelia perrugosaria* Linds., Lich. and Fungi Otago p. 437, t. XXX, f. 23-28. — Peritheciis gregariis semiimmersis, nigris, e cellulis minutis densis atro-brunneis formatis; ascis cylindraceis v. clavatis, copiose paraphysatis, jodo flavescentibus, octosporis, 50 \times 12; sporidiis obli-

que monostichis v. distichis, ellipsoideis, 1-septatis, non constrictis 12 \approx 6-7, brunneis.

Hab. in apotheciis, quæ nigro-punctata fiunt, Placopsidis perrugosæ, Otago in Nova Zelandia.

24. *Didymosphæria* ? *Sauteri* (Körb.) Wint. — Syll. IX, pag. 738 — 3919
var. *margarodes* (Norm.) Sacc. et Trav. — Syll. XIX, p. 600. —
Polycoccum Sauteri var. *margarodes* Norm., Arnold in Flora, 57
(1874) pag. 174, t. II, fig. 10. — Sporidiis fuscis, didymis, 18-
22 \approx 8-9.

Hab. parasitice in Lichenibus in Lapponia.

25. *Didymosphæria rugulosaria* (Linds.) Sacc. et Trott., *Microthelia* 3920
rugulosaria Linds., Lichenicol. Micro-fungi, p. 540, t. XXIII, f. 32.
— Peritheciis minutissimis, punctiformibus v. papilliformibus, ni-
gris, innato-superficialibus; ascis filiformi-paraphysatis, 40 \approx 12-13,
octosporis; sporidiis ellipsoideo-clavatis, 12 \approx 4,5, loculo superiori
crassiore et obtusiore, brunneis.

Hab. in apotheciis Placodii rugulosi ad saxa in Tasmania.

MICROTHELIÆ spec. Lindsayanæ, in Syll. XX, p. 89-90 citatæ, rectius
sub nominibus seq. in Syll. voluminibus præcedentibus describun-
tur: *Microthelia atricola* = *Tichothecium erraticum*, Syll. IX, 726
— *M. Cookei* = *Mycosphærella Cookei*, Syll. XVII, 649 — *M. pa-*
rietinaria = *Didymosphæria parietinaria*, Syll. XVII, 681 — *M.*
ramalinaria (sterilis, indeterminanda) — *M. stereocaulicola* = *Di-*
didymosphæria stereocaulicola, Syll. XVII, 681. — *M. Umbilicariæ* =
Leptosphaeria Umbilicaricæ, Syll. XVII, 731 — *M. vesicularia* =
Tichothecium pygmaeum, Syll. IX, 726. — Ceteræ species sub ge-
neribus variis in ipso hoc volumine describuntur.

MASSARIELLA Speg. — Syll. I p. 716, IX p. 739, XI p. 314, XIV
p. 555, XVI p. 503, XVII p. 683.

1. *Massariella berberidicola* (Rehm) Sacc. et Trott., *Phoreys berbe-* 3921
ridicola Rehm, Ann. Myc. IV (1906) p. 263. — Peritheciis gre-
gariis in cortice interiore fuscato nidulantibus, plane tectis, ex pe-
ridermio immutato vix protuberantibus, globulosis, ostiolis minimis
prominentibus, nigris, submembranaceis, contextu parenchymatico,
fusco, glabris 0,4-0,5 mm. diam.; ascis cylindræis, apicè rotun-
datis, 200-220 \approx 18 octosporis; sporidiis oblongis, utrinque obtusis,
medio septatis et valde constrictis, 24-27 \approx 15, 1-stichis; paraphy-
sibus ramosis, 3 μ . cr.

Hab. ad truncum *Berberidis vulgaris* juxta Eibsee sub monte Zugspitz alpium Bavarie.

2. *Massariella Hualaniæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3922 (1909) p. 368 c. ic. — Peritheciis denudatis lenticularibus, gregariis, vix papillulato-ostiolatis atris, 220-250 μ . diam.; ascis cylindraceutis paraphysatis, octosporis 130 \times 20; sporidiis sæpius oblique monostichis, in ascis tunica mucosa crassa hyalina vestitis, extus sæpius denudatis, 22-28 \times 10-12, primo medio 1-septatis, non v. vix constrictis, hyalinis, serius 3-septatis constrictis fuligineis, loculis subæqualibus subcuboideis grosse 1-guttulatis.

Hab. ad ramos aridos et putrescentes *Hualaniæ colletio-*idis, Chacras de Coria prope Mendoza, Rep. Argentina Amer. austr. — An melius *Massaria*?

3. *Massariella Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3923 (1908) pag. 123, c. ic. — Corticola, epidermide velata; peritheciis lenticularibus, atris, membranaceo-carbonaceis, laxè gregariis, 400-750 μ . diam., ostiolo vix papillulato carbonaceo; ascis clavulato-cylindraceutis, aparaphysatis, breviter cuneato-pedicellatis, 150 \times 28 p. sporif. 120 μ . longa, apice obtuse rotundatis crasseque tunicatis; sporidiis majusculis ellipsoideo-subbiconicis, medio 1-septatis non v. vix constrictis, opace fuligineis, primitus tunica tenuissime mucosa hyalina obvolutis, dein nudis, utrinque rotundatis sed sæpius apiculatis, 30-35 \times 14-15.

Hab. vulgata ad ramos emortuos *Ilicis paraguariensis* (*Yerba Mate*) Misiones Argentinae Amer. austr.

4. *Massariella Montteæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3924 (1909) p. 367, cum icon. — Peritheciis sparsis v. laxè gregariis primo cortice tectis eoque secedente denudatis, parvis, carbonaceis, lenticulari-conoideis 150-250 μ . diam., vix ostiolato-papillatis; ascis subcylindraceutis aparaphysatis subsessilibus, octosporis, 140-150 \times 15-20; sporidiis monostichis ellipsoideo-didymis, tunica mucosa hyalina vestitis, fuligineis, grosse uniguttulatis, 20-24 \times 12-13.

Hab. ad ramulos emortuos *Montteæ* aphyllæ in preandinis Potrerillos, prope Mendoza Rep. Argentina Amer. austr.

5. *Massariella palmicola* P. Henn., Engl. Jahrb. XXXVII (1905) 3925 p. 126. — Peritheciis gregarie sparsis, omnino immersis, atro-carbonaceis, globulosis v. ovoideis, 1-1,5 mm. diam., ostioliis vix erumpentibus, massam atram sporidiorum eructantibus; ascis clavatis, stipitatis, apice obtuse rotundatis, octosporis, 200-230 \times 9-12, paraphysibus filiformibus, hyalinis, 2 μ . crassis; sporidiis oblique

monostichis, oblongis, subcylindraceis, utrinque obtusiusculis, rectis, ad basim 1-septatis, olivaceo-brunneis, 2-guttulatis, 20-30 \times 6-8, cellula inferiori subpapillata, 4-6 \times 3-4.

Hab. ad stipitem emortuum *Palmae* spec., Kamerun Africae trop.

6. *Massariella Palmarum* Maffei, Contr. Mic. Ligust. Atti R. Istit. Bot. 3926 Pavia ser. II, v. XII (1907, extr.) p. 5, tav. fig. 1-5. — Maculis atris; peritheciis sparsis v. gregariis, globoso-depressis, maiusculis, ostiolo erumpente; ascis cylindraceis, 80-110 \times 10-13, paraphysatis, octosporis; sporidiis oblique monostichis, ellipsoidoideis, uniseptatis, ad septum constrictis, olivaceo-fuligineis, strato hyalino obvolvtis, 15-18 \times 6-8.

Hab. in foliis *Cocoës campestris* et *Phœnicis silvestris*, Pegli Liguriæ Ital. bor.

7. *Massariella lovearena* (Rehm) Sacc. et Trott., *Phorcys Lovearena* 3927 Rehm, Ann. Mycol. IV (1906) p. 269. — Peritheciis sparsis, folio immutato innatis, globulosis, papillula conoidea, obtusa, 0,2 mm. prominente, fusco-nigris, 0,2 mm. diam., subcoriaceis glabris; ascis cylindraceis, apice rotundatis, 150-180 \times 28-30, 8-sporis; sporidiis ellipsoideis, medio septatis et valde constrictis, utroque apice papillulato-acutatis, subfuscis, guttulis minutissimis oleosis repletis, 30-38 \times 12-15, strato mucoso 5 μ . lato obductis, 1-stichis; paraphysibus filiformibus.

Hab. in folio graminis in muro prope Lovere (lacus Iseo) Italiae sup. (Dr. REHM). — Proxima *Mass. Eriophori* Feltgen (Pilzfl. Luxemburg, III, p. 162) ad *Eriophorum angustifolium*, sed sporidiis 40-43 \times 17,5-28 haud acutatis plane diversa videtur.

AMPHISPHERIA Ces. et De Not. — Syll. I p. 718, IX p. 741, XI p. 315, XIV p. 555, XVI p. 503, XVII p. 683.

1. *Amphisphaeria æruginosa* Fairm., Proc. Rochester Ac. of Sc. IV 3928 (1906) p. 221, tab. XXII, fig. 1-4. — Peritheciis sparsis v. gregariis, minutis, 80-100 μ . diam., depresse hemisphaericis, erumpentibus, nigris, ostiolo minuto papillato; ascis teretibus, 4-8-sporis; sporidiis anguste ellipsoideis, utrinque obtusulis, rectis vel curvis, 1-septatis, vix constrictis, monostichis, initio fumosis dein pallide brunneis, 13-15 \times 2,5-3,5.

Hab. ad asseses dejectos vetustos *Tiliæ* pr. Lyndonville N. Y. Amer. bor. — Lignum, quo innascitur, intus *Chlorosplenii* ope est viridi-tinctum.

2. *Amphisphæria biformis* (Borr.) Rehm, Ann. Mycol. IV (1906) p. 264, *Verrucaria biformis* Borr. in Engl. Bot. Suppl. I, p. 617, *Verrucaria micula* Flotow ap. Garovaglio, Tent. disp. II, p. 78, t. suppl. I, f. 4, *Microthelia micula* Korb. Syst. lich. Germ. p. 373 et Parerga pag. 397. — Mycelio tenuissimo indeterminato effuso cinereo-rufescente; nitidulo, dein opace subgranuloso; peritheciis sphaericis acuminato-papillatis v. collapsis; ascis elliptico-obovatis, paraphysibus tenuibus implexo-ramosis articulatis obvallatis; sporidiis dense 2-3-seriatis, ellipsoideis, $12,5-15,5 \times 4-5,7$, bilocularibus, loculis conformibus, late conicis apice rotundatis.

Hab. in cortice Tiliæ in tota fere Europa. — Auctoritate cl. Rehm huc translata species.

3. *Amphisphæria ephemera* Rehm, Ann. Mycol. IV (1906) p. 263. — Peritheciis in interiore corticis relaxati sparsis, sessilibus, globosis, nudo oculo vix conspicuis, nigris, circa ostiolum pilis obtusis, fuscidulis, septatis, $10-25 \times 5$ obsessis, 100μ . diam., contextu parenchymatico; ascis clavatis, paraphysibus septatis obvallatis, teneris, 60×15 , octosporis; sporidiis oblongo-ovoideis, medio septatis, non constrictis, $12-13 \times 6-7$, distichis, fuscis, grosse 2-guttatis.

Hab. ad corticem Piri Mali, Sugenheim Franconiae bav.

4. *Amphisphæria xera* Fairm., Ann. myc. VIII (1910) p. 327. — Peritheciis $0,5$ mm. diam., atris, carbonaceis, sparsis vel subgregariis, initio immersis, dein superficialibus, glabris, ostiolo minuto; ascis cylindraceis, p. sp. 70-75, octosporis (? paraphysatis); sporidiis oblongis, uniseptatis, constrictis, loculis inaequalibus, guttulatis, granulosis, sæpissime tenui fissura divisis, striatis v. corrugatis (ex siccitate?), monostichis v. subdistichis, fusco-olivaceis, fuligineisve, $17-23 \times 6-7$.

Hab. ad corticem ? Pruni sp. in silvis prope Lyndonville N. Y. Amer. bor.

5. *Amphisphæria Schulzeri* Sacc. et Trav. - Syll. XIX, pag. 68 - *Sphæria Amphisphæria* Schulz. v. Mügg. in Verhandl. zool.-bot. Gesellsch (1871) p. 1255, t. 13, f. 36. — Peritheciis subsuperficialibus, approximatis, globoso-ovoideis, nunc papillatis, nunc epapillatis; minute verruculosis, $200-270 \mu$. diam., tenuiter carbonaceis, vetustis vertice ruptis; ascis cylindraceis, filiformi paraphysatis, octosporis, breviter pedicellatis; sporidiis recte vel oblique monostichis, ellipsoideo-oblongis, utrinque retundatis v. obtuse te-

nuatis, constricto-didymis, $17 \approx 8$, fuligineis, extra ascos subinde 2-3-septatis.

Hab. in ramis emortuis *Cydoniæ vulgaris* in Hungaria.

6. *Amphisphæria quinquespora* Schulzer v. Mügg. in Verhandl. zool.-bot. Gesell. Wien (1871) p. 1224 et 1242, t. 13, f. 4 (*libera*) et 22 (*obtecta*). — Peritheciis globosis 300-400 μ . diam. nunc liberis verruculosus nunc peridermio pustulatum elevato tectis, nigris; ascis breviter oblongo-cylindraceis, brevissime stipitatis 5-sporis filiformi-paraphysatis; sporidiis ellipsoideo-oblongis, constricto-1-septatis, maturis $18-22 \approx 8-9$.

Hab. in ramis corticatis et decorticatis *Cydoniæ vulgaris* in Hungaria. — An sporidia semper sint quina in quoqueasco, dubitandum.

7. *Amphisphæria Cydoniæ* Schulz. v. Mügg. in Verh. zool.-bot. Gesellsch. Wien (1871) p. 1251, t. XIII, f. 31. — Peritheciis gregariis superficialibus, globoso-depressis, non papillatis, poro pertusis, nigris, 300-400 μ . diam.; ascis filiformi-paraphysatis clavatis, apice rotundatis deorsum tenuato-stipitatis, octosporis; sporidiis ellipsoideo-oblongis, utrinque obtusulis, constricto-1-septatis, umbrino-brunneis, $12-16 \approx 4-5$, oblique monostichis, vel apice subdistichis.

Hab. in ramis decorticatis *Cydoniæ vulgaris* in Hungaria.

8. *Amphisphæria Heraclei* Noelli, Malp. XIX (1905) p. 360. — Peritheciis sparsis, nigris, in greges minutos coadunatis, v. solitariis, superficialibus, globosis, sursum in ostiolum conicum productis, 300 μ . diam.; ascis cylindraceis, basim versus sæpe curvatis, $48-73 \approx 4-5$; paraphysibus filiformibus ascos æquantibus; sporidiis minutis, constricto-1-septatis, fuligineis, non guttulatis, $7-11 \approx 4-5$, loculo uno minore et obtusiore.

Hab. in caulibus siccis *Heraclei Sphondylii* in silvis Stupinigi, pr. Taurinum Ital. bor. — Verisimiliter forma *Didymosphæriæ conoideæ* Niessl — Syll. I p. 702.

9. *Amphisphæria pseudostromatica* Rick, Ann. Mycol. III (1905) p. 240. — Peritheciis innatis, ad medium productis, 1^o mm. latis, ostiolo minuto, in substrato longe lateque nigrefacto insidentibus, mycelio subperisporioideo circumdati, arcte aggregatis, atris; ascis cylindricis, sessilibus, $60 \approx 20$, versus apicem angustioribus, octosporis; sporidiis cylindricis, medio septatis, vix constrictis, fuligineis, biguttulatis, distichis, $20-25 \approx 6$, paraphysibus multis, ramosis, filiformibus.

Hab. in planta scandente generis *Strychni*, in Brasilia. —

Est affinis *Amphisphaeria Pseudo-dothideae* Rehm.

10. *Amphisphaeria ericeti* B. R. S. in Saccardo, Not. Myc. VI, Ann. 3987
Myc. v. III (1905) p. 508. — Peritheciis globosis, sparsis, innatis dein semi-emergentibus, levibus, 260-300 μ . diam., poro latiusculo apertis, nigris; ascis clavato-cylindraceutis, 70-80 \times 9-11, breve noduloso-stipitatis, octosporis; paraphysibus filiformibus ascos superantibus; sporidiis distichis, breve fusoides, plerumque curvulis, 12-18 \times 4-5, brunneis, medio 1-septatis constrictisque, loculo infero attenuato, supero crassiore et obtusiusculo.

Hab. in ligno canescente *Callunae vulgaris*, Calmthout pr. Anvers Belgii.

11. *Amphisphaeria ulmicola* (Curr.) Sacc. et Trav. - Syll. XIX p. 68 3988
- *Sphaeria ulmicola* Curr. in Trans. Linn. Soc. XXII (1859) p. 321, t. 58. f. 58. — Peritheciis majusculis, globosis, ligno semiimmersis, ostiolo papillato, dein deciduo et porum latum relinquentibus; ascis non visis; sporidiis oblongis utrinque obtuse tenuatis, medio constrictis, loculo sup. subinde lenissime crassiore, 22-24 \times 5,5-6,5.

Hab. in ligno *Ulm*i in Britannia.

12. *Amphisphaeria polymorpha* Rehm ap. Fairm., Proc. Rochest. Ac. 3989
of Sc. IV (1906) p. 222. — Peritheciis dispersis, primitus innatis dein emergentibus, globoso-conoideis, plus minusve elongato-papillatis, atris, glabris, 0,5 mm. diam., ad basim hyphis crebris, ramosis, fuscis 3-4 μ . cr. obsessis, contextu parenchymatico subcarbonaceo; ascis elongato-fusoides, apice rotundatis, crasse tunicatis, 210-250 \times 30-35, tetra-octosporis; sporidiis fusoides, rectis, primitus utrinque acutissimis, episporio crasso instructis, medio septatis, vix constrictis, evanido-guttulatis, 75-80 \times 12-20, distichis; paraphysibus ramosis, septatis, hyalinis, 2 μ . cr.

Hab. ad corticem trunci dejecti prob. *Ulm*i sp. in silvaticis pr. Lyndonville. — *Polymorpha* dicta quia sec. aetatem colore et forma variat.

13. *Amphisphaeria lignicola* (v. Höhn.) Sacc. et Trott., *Didymascina* 3940
lignicola v. Höhn., Ann. Mycol. III (1905) p. 331. — Peritheciis ovoideo-globosis, ligno atrato immersis, subsparis, initio clausis, denique poro rotundo pertusis, 300-400 μ . diam., cinereo-nigris v. nigricantibus; excipulo genuino nullo; ascis copiosis, cylindricis, vix stipitatis, octosporis 100-110 \times 9-10; sporidiis medio 1-septatis, non v. vix constrictis, monostichis, brunneis, oblongo-

ellipsoideis 14-20 \times 6,5-8; paraphysibus copiosis, filiformibus, sursum ramulosis, reticulato-connexis epithecium formantibus.

Hab. in ligno Carpini Betuli prope Pressbaum in Wiener Wald - cl. v. HÖHNEL hanc speciem æque ac *Amphisphæriam salicicolam* Allesch. - Syll. XIV p. 556 (= *Didymosphæria decolorans* Rehm - Syll. XIV p. 553) in genus novum (*Didymascina*) primitus erexit et ad *Ostropeas* retulit, sed posterius delevit (Fragm. IX p. 41).

14. *Amphisphæria nitidula* v. Höhnel, Fragm. z. Mycol. III in Sitzsb. 3941 K. Ak. d. Wiss. Wien, Bd. CXVI Abt. I (1907) p. 120. — Peritheciis superficialibus, sparsis v. in greges parvos proximatis, globosis, 260-500 μ . diam., nitide nigris, carbonaceis, distincte rugulosis, ostiolo depresso, 20-25 μ . lato; paraphysibus copiosissimis filiformibus, ascos æquantibus; ascis clavatis, sursum tenuatis, in pedicellum 20-25 μ . longum productis, octosporis, 60 \times 8-9; sporidiis distichis, diu hyalinis, demum cinereo-brunneis, bicellularibus, ad septum obscurius coloratum non constrictis, oblongo-ellipsoideis, utrinque rotundatis, initio pluriguttulatis, tenui-tunicatis, 6-8 \times 3-4.

Hab. in ligno putri Carpini Betuli, Wiener Wald Austriae. — Videtur affinis *A. sardoe* et *A. deformi*.

15. *Amphisphæria aquatica* Plöttner et Kirsch., Verh. Bot. Ver. Brandenb. 3942 XLVIII (1906) p. 52. — Peritheciis solitariis v. in greges minutos proximatis, basi lata ligno adnato-sessilibus, sursum conoideis 0,5-0,7 mm. diam., nigris, membranaceis; ascis cylindræis, sessilibus, apice plano-rotundatis, 200 \times 14-18, octosporis; sporidiis ellipsoideis, plerumque irregularibus, utrinque rotundatis v. subacutatis, 2-cellularibus, non v. vix constrictis, dense pluriguttulatis, monostichis, 30-37 \times 8-14; paraphysibus filiformibus, hyalinis.

Hab. in lignis salicinis, aqua diu immersis, in Borussia (PLÖTTNER et KIRSCHSTEIN).

16. *Amphisphæria Lojkæ* Rehm, Ann. Mycol. IV (1906) p. 261. — 3943 Peritheciis gregariis emergentibus, basi cortice immersis, globulosis, atris, scabriusculis, haud papillulatis, poro perspicuo pertusis, carbonaceis, 0,4-1 mm. diam.; ascis clavatis, octosporis filiformi-paraphysatis; sporidiis clavatis, utrinque obtusis, monostichis, sub medio 1-septatis, leniter constrictis, strato mucoso lato obductis, fuscis, 36 \times 12, cellula superiore 21-24 \times 12, inferiore 12 \times 6.

Hab. ad corticem Quercus, Galizinberger pr. Vindobonam (LOJKA). — Affinis *Amp. inæquali*.

lato; ascis clavatis deorsum breviter tenuato-stipitatis, 110-120 \times 25-32, apice rotundatis, bisporis; sporidiis oblongis, utrinque obtusulis v. apice uno acutulis, constricto-1-septatis, 50-64 \times 24-30, loculis subglobosis, demum secedentibus.

Hab. in ligno putrescente quercino, Havelufer pr. Rathenow Borussiae.

NEOPECTIA Sacc. — Syll. IX p. 749, XI p. 317, XIV p. 558, XVI p. 506, XVII p. 686.

1. **Neopectia Bambusæ** v. Höhn. Fragm. z. Myk. VI in Stzb. k. 8952 Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 329. — Peritheciis superficialibus laxè gregariis, carbonaceis, solidis, asperulis, opacis, globosis, supra rotundatis, 400-600 μ . lat., basi hyphis violaceo-brunneis, tortuosis 3-4 μ . cr. cinctis; ascis paraphysatis, longe pedicellatis, apice truncatis, tenui-tunicatis, octosporis, 120 \times 16; sporidiis bi-triseriatis, diaphane brunneis, oblongo-ellipsoideis, utrinque rotundatis, ad septum leniter constrictis, 16-19 \times 6-7, rectis curvulise, 2-4-guttulatis.

Hab. ad culmos putrescentes Bambusæ (Gigantochloæ) sp. in horto botanico, Buitenzorg Javae. — Status conidicus simul adest: *Phaeisaria Bambusæ* v. Höhn. quam cfr.

2. **Neopectia nobilis** Rick, Broteria V (1906) pag. 44. — Peritheciis 8953 majusculis, 1 mm. diam., orbicularibus v. cylindraceis, superius fuligineis, versus ostiola late apertis, inferius pilis longis $\frac{1}{2}$ mm., fuligineis, simplicibus, 3 μ . latis vestitis; contextu coriaceo-molli; ascis 180 \times 13, breviter pedicellatis, clavatis, octosporis; sporidiis fusoides, biserialibus, primo hyalinis, demum fuligineis, uniseptatis, in septo parum constrictis, guttulatis, 40-50 \times 12; paraphysibus hyalinis, ramosis, ascos superantibus et obtegentibus, 2 μ . latis.

Hab. in ramis putridis, Rio Grande do Sul Brasiliæ. — Species nobilis ab omnibus distincta et discomycetis pilosis accedens. — Var. *calva* Rick, in Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 398. — A typo differt peritheciis levibus. — Ad cortices Petropolis, Rio Grande do Sul Brasiliæ.

3. **Neopectia Roberti** Starb., Ascom. Schwed. Chaco-Cordill. Exped. 8954 Arkiv f. Bot. V (1905) p. 16, fig. 11 a-c. — Subiculo longe lateque effuso, ex hyphis rigidis, longissimis, parce septatis, simplicibus interdum paullum fasciculatis, rectis et divergentibus, vix repentibus, 5-9 μ . crassis composito; peritheciis primo gregariis vel confertulis, deinde densissime aggregatis fere crustam valde

effusam formantibus, sphærioideis vel mutua pressione paullum angulatis, vertice applanatis, pilis rigidis, flexuosis, sæpe genueflexis, parce deorsum dense septatis, fusco-nigris, ad apicem fragilem hyalinis, hyphis mycelii similibus undique vestitis, nigris, vertice glabro, sordide griseo-rubello, paullum e centro poro pertuso radiatim sulcatulo, denique totis levibus, rugosis, contextu minute globuloso, molliuscule coriaceo, 300-500 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 94-102 \times 12-14 p. sp.; sporidiis superioribus di-tristichis, inferioribus monostichis, fusoides, medio constrictulis, septatis, primo hyalinis, deinde pallide fuscescentibus, utrinque obtusiuscule apiculatis, appendicula longiuscula, angusta, hyalina præditis, 32-36 \times 6,5, cum appendice 40-45 μ . longis; paraphysibus filiformibus flexuosis, ramosissimis, hyalinis, ascos obvallantibus.

Hab. in trunco mucido in silva primæva, Quinta pr., Laguna de la Brea, Prov. Jujuy Argentina. — *Herpötrichis Schiedermayerianæ* affinis videtur, sed sporidiis bilocularibus *Neopeckia* adscribenda.

4. *Neopeckia rhodosticta* (B. et Br.) Sacc. - Syll. XI, 317 - Huc referenda est, monente quoque cl. v. HÖHNEL (qui exempl. meliora javanica communicavit), *Letendræa atrata* Penz. et Sacc. - Syll. XIV p. 646. 3955

LIZONIA Ces. et De Not. — Syll. I p. 574, IX p. 679, XIV p. 538, XVI p. 485.

1. *Lizonia Smilacis* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 386. 3956
Maculis subrotundis, flavis, centro brunneis, 3-4 mm. lat., dein confluentibus; peritheciis hypophyllis 3-7 coadunatis, 260-290 μ . lat., 320 μ . altis, e mycelio intercellulari pseudo-parenchymatico oriundis, nigris, glabris, brevissime crasse substipitatis, pachydermaticis, ostiolo vix conspicuo 15 μ . alto, poro 10 μ . lato pertuso; nucleo albo; ascis copiose filiformi-paraphysatis, tereti-clavatis, 100 \times 14, octosporis, curvulis, teneris; sporidiis fusoides, curvulis, levibus, 22-24 \times 4-5, bicellularibus, tunica hyalina dein brunneola.

Hab. in foliis *Smilacis* sp. pr. Tjisaroea pr. Buitenzorg Java. — Sporidia serius interdum 4-cellularia fiunt.

2. *Lizonia Selaginellæ* Raciborski, Bull. Ac. Sc. Cracovic (1909) p. 386. 3957
— Peritheciis in pseudostromate nigro chordiformi parum evoluto superficialibus, confertim gregariis fere conjunctis, globoso-ovoideis,

250-360 μ . lat., 400 μ . alt., ostiolo minuto depresso præditi, glabris, nigris; ascis aparaphysatis, 120 \approx 10, teneris, apice truncato-rotundatis, octosporis; sporidiis monostichis, ovoideis, hyalinis, bicellularibus, 12-17 \approx 5, septo vix constrictis, levibus, hyalinis, demum brunneolis.

Hab. in surculis *Selaginellæ cupressinæ* pr. Salak ins. Javæ. — Sporidia ante germinationem sæpe 4-cellularia fiunt.

ALOYSIELLA Mattir. et Sacc., *Annali di Botanica* VII (1908) p. 143; *Il Ruwenzori* (1909) *Fungi* pag. 5 (Etym. a Principe Aloysio SABAUDLÆ Aprutii Duce). — Perithecia subiculo dematiaceo insidentia, carbonacea, nigricantia, globosa, umbilicata, superne omnino nuda, non papillata; ascis cylindraceis octosporis, paraphysatis; sporidiis ovoideo-oblongis, 1-septatis, fuligineo-olivaceis. — *Obs.* A *Melanopsamma* differt sporidiis coloratis nec hyalinis, a *Neopeckia* peritheciis nudis, non papillatis; ab utraque quia parasitica et cecidogena.

1. **Aloysiella ruwenzorensis** Matt. et Sacc., *Annali di Botanica* VII 3958 (1908) p. 143; *Il Ruwenzori* etc. p. 6, tab. I, fig. 1-7. — Biophila, ramos matricis in formam fusoideam conspicue tumefaciens; subiculo velutino, nigro, æquali, partem matricis incrassatam tantum occupante, hyphis dense stipatis, ascendentibus, simplicibus v. parce ramosis, septatis, non constrictis, apice obtusiusculis, atrofuligineis, 200-300 μ 4-5; conidiis nullis. — Peritheciis in subiculo hinc inde laxè sparsis, immersis, demum emergentibus, 300 μ . diam. et ultra, ex subgloboso-mox depresso-umbilicatis, nigris, glabris, basi subconoidea insertis, ubique pilis subicularibus vestitis, ostiolo latiuscule impresso, non papillato præditi; contextu parenchymatico crassiusculo; ascis cylindraceis brevissime stipitatis, apice rotundatis, octosporis, 85-90 \approx 8, paraphysibus filiformibus superne dichotome ramosis, hyalinis obvallatis; sporidiis monostichis v. partim distichis, oblongo-ovoides, medio 1-septatis, non v. vix constrictis, utrinque obtusiusculis, 16-19 \approx 5-6, initio hyalinis, demum olivaceo-fuligineis.

Hab. in ramis vivis *Ericæ arboreæ* in silvis inter Bihunga et Nakitáva usque ad Bujungolo, 1920 ad 3798 m. Ruwenzori, Africa austr.

DELITSCHIELLA Sacc. — *Syll.* XVII p. 688.

1. **Delitschiella elegans** (Santer.) Sacc. et Trott., *Delitschia elegans* 3959

Santermeister F. L. in Jahresh. Ver. Vat. Natk. Würtemb. LXVI p. 399. — Peritheciis generis; ascis sexdecimsporis; sporidiis oblongis $48 \approx 16$.

Hab. in stercore leporino; sociis *Sordaria bombardioide* et *Sporormia ambigua* pr Sigmaringen. — A *Delitschiella polyspora* sporidiis paullo minoribus imprimis dignoscitur.

Sect. 6. Hyalophragmiæ.

SPHÆRULINA Sacc. — Syll. II p. 186, IX p. 846, XI p. 336, XIV p. 581, XVI p. 528, XVII p. 692.

1. **Sphærulina Anemones** Rehm, Ann. Mycol. V (1907) pag. 539. — 3960
Peritheciis in hypophyllo dispersis, sessilibus, globulosis, atris in papillulam minutissimam elongatis, conoideis, 250μ . alt. et lat. contextu parenchymatico fusco; ascis ovalibus sive piriformibus, lata basi sessilibus, versus apicem angustatis, crasse tunicatis, apice obtusis $200 \approx 70$, 8-sporis; sporidiis subclavatis, transverse 4-septatis, parte superiore minus longa, sed multo latiore, 1-septata inferiore conoidea 2-septata, quaque cellula gutta magna oleosa instructa, $50-65 \approx 20$ distichis, hyalinis; paraphysisibus nullis.

Hab. in hypophyllo foliorum *Anemones silvestris* prope Arnstadt Thuringiæ (H. Sydow). — *Sphærulinae Potentillæ* cognata.

2. **Sphærulina Oxalidis** Rehm, Ann. Mycol. V (1907) pag. 517. — 3961
Peritheciis in cortice late denigrato gregarie innatis eumque protrudentibus, globosis, papillula minima modo prominente, $0,2 \text{ mm.}$ diam., excipulo tenuissime parenchymatico fuscidulo; ascis oblongo-fusiformibus, sessilibus, $40-50 \approx 9-10$ octosporis; sporidiis oblongis, utrinque rotundatis, haud constrictis, medio 1-septatis, utraque cellula 1-guttata, hyalinis, strato tenui mucoso obductis, $10-12 \approx 2,5-3$ distichis; paraphysisibus nullis.

Hab. ad ramulos *Oxalidis strictæ*, Texas (Long jr., comm. ATKINSON). — An *Didymella* sp.? sed paraphyses nullæ observante cl. Rehm; sed cur non potius *Sphærellæ* sp.?

3. **Sphærulina? Hamadryadum** Speg., An. Mus. Nac. Buenos Aires 3962 t. XIX (1909) p. 373. — Peritheciis epiphyllis innato-erumpentibus, hinc inde matrice arescente cinerescente leniter nigrificata insidentibus, ex hemisphærico subconoideis, $90-120 \mu$. diam., pilis

unicellularibus 20-30 \times 5, olivaceis, laxe adpersis; ascis clavulatis brevissime pedicellatis, aparaphysatis, octosporis, 70-80 \times 14-16; sporidiis oblique distichis rectis v. lenissime subcurvulis, e cylindraceo subclavulatis, 24-26 \times 6-7, semper hyalinis, primo 4-blastis dein 1-septatis, postremo obsolete 3-septatis.

Hab. ad folia arida Hamadryadis Kingi prope Lago Blanco, Patagonia Amer. austr.

4. *Sphærulina Potebniæ* Sacc., in Potebnia, Myc. St., Ann. Myc. V 3963 (1907) p. 13, fig. 22, Trav. Soc. Nat. Univ. Kharkow XXXXVIII (1907) pag. 61. — Peritheciis gregariis superficialibus 70-100 μ , sphaeroidis; ascis cæspitosis ovoideo-cylindraceis, 40-50 \times 10-17; paraphysibus nullis; sporidiis distichis, initio bilocularibus, hyalinis, dein triseptatis, pallide viridi-flavis, 12-14 \times 4,5-5.

Hab. in ramis Piri communis prope Kursk Stadt Rylsk Poloniae

5. *Sphærulina Saccardiana* Potebnia, Myc. St., Ann. Myc. V (1907), 3964 p. 14 fig. 23 et Trav. Soc. Nat. Univers. Kharkow XXXXVIII (1907) pag. 61. — Peritheciis 170-200 μ . cr.; ascis cylindraceis 85 \times 9-10, paraphysibus destitutis; sporidiis distichis, flavidis 22-26 \times 6-7, 6-7-septatis, medio constrictis, raro longitudinaliter et imperfecte septatis.

Hab. in ramis Piri Mali, socio Fusicocco microsporo, prope Kursk Poloniae.

6. *Sphærulina Rehmiana* Jaap, Fungi sel. exsicc. n. 318 a, b; Abh. 3965 Bot. Ver. Prov. Brandenb. LII (1910) Extr. p. 10. — Peritheciis amphigenis gregariis, sæpius epiphyllis, erumpentibus, globoso-depressis, 100-150 μ diam., poro pertusis, brunneo-nigris; ascis fasciculatis, aparaphysatis, tereti-fusoideis v. clavatis, apice acutato-rotundatis, 50-60 \times 6-7, senio elongatis et curvatis, octosporis; sporidiis tereti-fusoideis, obtusis, hyalinis, 2-4-cellularibus, distichis, parallele dispositis, 30-50 \times 2,5-3,5.

Hab. in foliis Rosæ centifoliae, socio statu conidico Phleospora Rosæ (Desm.) v. Höhn., prope Triglitz Germaniae. — *Sphærulince myriadeæ* subaffinis.

7. *Sphærulina Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3966 (1908) p. 124, cum icon. — Peritheciis laxè gregariis, hypophyllis, subepidermicis, 100-150 μ . diam., subcarbonaceis poro rotundo pertusis; ascis clavulatis modice tenuiterque pedicellatis aparaphysatis 80-90 μ . long., parte sp. 50-60 \times 12-14, pedicello 30-40 \times 1,5-2, octosporis; sporidiis conglobatis ellipsoideo-cylindraceis, medio in-

crassatis, utrinque obtusissimis, rotundatis, per ætatem biseptatis, 12-18 \times 4-6, semper hyalinis.

Hab. vulgata ad folia dejecta putrescentia, Ilicis paraguayensis, Argentina, Amer. austr.

- 8 *Sphærulina plantaginea* Rehm, Ascom. exsicc. fasc. 42, n. 1793; 3967. Ann. Myc. VI (1908) p. 489. — Peritheciis in maculis epiphyllis orbicularibus, 2-3 mm. lat. gregariis, demum arcte congregatis, innatis, globosis, poro pertusis, glabris, nigris, 120-130 μ , humidis emergentibus, excipulo crasso fusco parenchymatice contexto; ascis clavatis, apice rotundatis, crasse tunicatis, 70-80 \times 18-20, octosporis; sporidiis primitus obtusis clavatis et strato hyalino obductis, 1-3-septatis, hyalinis, demum subfusoides, medio subconstrictis, extra ascum dilute fuscidulis, 20-30 \times 8-9, distichis; paraphisibus subramosis.

Hab. in foliis vivis Plantaginis, Sao Leopoldo, Rio Grande do Sul, Brasilia (Rick).

9. *Sphærulina Valerianæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3968 (1909), p. 374. — Peritheciis sæpius epiphyllis maculis vagis indeterminatis 3-5 mm. diam. laxè pauci-insidentibus, lenticularibus, 100 μ . diam.; ascis clavatis 3-4 tantum in quoque perithecio, apophysatis, brevissime pedicellatis 60 \times 20, octosporis; sporidiis subclavulatis 22 \times 16, primo 1-septatis dein 4-septatis, hyalinis, tunica tenuissima mucosa concolore diu vestitis.

Hab. ad folia languida Valerianæ megalorrhizæ secus Rio Blanco Tucuman, Rep. Argentina.

10. *Sphærulina Taxi* Massee, Diseas. cultiv. Plants (1910) pag. 220, 3969 fig. 63. — Peritheciis gregariis epidermide pustulata tectis, globoso-lenticularibus, nigris, ostiolo breviter papillato erumpente; ascis elongato-clavatis, apice incrassatis, 65-75 \times 12-14, apophysatis; sporidiis mono-distichis anguste ellipsoideis, utrinque acutiusculis, hyalinis, diu 1-septatis, denique 3-septatis, 16-22 \times 5.

Hab. in foliis Taxi baccatæ, quam valde vexat et denique necat, Cornwall et Yorkshire Britannicæ.

11. *Sphærulina paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 3970 t. XV (1908) p. 22. — Maculis maximis repando-sinuosis, linea callosa fuscescente limitatis, amphigenis, cinereo-albescentibus, lineis pallidioribus subcircinantibus notatis; peritheciis sæpius epiphyllis laxissime gregariis, inordinatis, epidermide tectis, ostiolo papillulato pertuso perforatis 120-150 μ . diam.; membranaceis, contextu parenchymatico fusco-fuligineo; ascis antice longiuscule

attenuatis acute rotundatis crassiusculeque tunicatis, postice subrotundatis brevissime crasseque pedicellatis 55-60 \times 12, octosporis; sporidiis ellipsoideo-elongatis, leniter inæquilateralibus, utrinque acutiuscule rotundatis, 20 \times 4, 3-septatis, hyalinis, oblique di- vel tri-stichis.

Hab. ad folia languida *Dracænæ* cujusdam in hortis, Sao Paulo, Brasilia (USTERI).

12. *Sphærulina?* *Æchmeæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3971 (1909) p. 373. — Maculis sæpius hypophyllis suborbicularibus indeterminatis pallidissime olivascentibus; peritheciis innatis per epidermidem erumpentibus, subglobosis 100-120 μ . diam., glabris, atris, ostiolo latissimo 20 μ . diam., impresso perforatis; ascis clavulatis paraphysatis breviter crassiusculeque pedicellatis octosporis, 60-80 \times 12-15; sporidiis fusoidis primo continuis serius 1-3-septatis postremo obsolete 5-septatis, 20-28 \times 4, semper hyalinis, per ætatem sæpius utrinque cauda (promycelio?) concolore brevioris ornatiss.

Hab. ad folia viva *Æchmeæ* polystachyæ prope Formosa, Argentina Amer. austr.

13. *Sphærulina Pleuropogonis* Rostr. Rep. second. norweg. arctic 3972 Exped. Fram., in Vidensk. Selsk. i Kristiania (1906) pag. 7. — Peritheciis gregariis, vaginicolis, fuscis; ascis clavato-fusoideis, 55-65 \times 10-12, aparaphysatis; sporidiis cylindræis, utrinque obtusis, hyalinis v. pallide flavescentibus, 19-20 \times 5-6, oblique monostichis.

Hab. in vaginis *Pleuropogonis* Sabineï, Fram's Fjord Norvegiæ.

14. *Sphærulina subtropica* Speg., An. Mus. Nac. Buenos Aires t. XIX 3973 (1909) p. 374. — Peritheciis sparsis lenticularibus, 120-150 μ . diam., subepidermicis, ostiolo umbilicato 30 μ . diam. pertusis; ascis subfusoideis brevissime noduloseque pedicellatis, 75-80 \times 12, semper plane aparaphysatis, octosporis; sporidiis subfusoideis, 16-20 \times 4-5, sæpius leniter subnavicularibus, primo continuis dein 2-4-blastis, postremo 3-septatis, semper hyalinis.

Hab. ad glumas rachidesque *Paspali* dilatati in pratis prope Tucuman, Argentina Amer. austr.

15. *Sphærulina Oryzæ* Y. Miyabe, Pilze Reispfl. Japan, Journ. Col. lege Agricult. Tokyo, II (1910) p. 245, t. XIII, p. 12-14 (fig. 12 ex errore fucata). — Peritheciis nigro-brunneis immersis papilliformi-prominulis ibique obscurioribus, globosis v. ellipsoideis 65-125 μ . diam. 47-75 μ . altis; ascis numerosis, crebris, clavatis vel

elongatis plerumque subincurvatis, $40-60 \times 10-13$, octosporis; sporidiis distichis, fusoideis, utrinque acutatis, quadrilocularibus, non constrictis, $15-20 \times 3-5$.

Hab. in foliis *Oryzæ sativæ* in Japonia.

METASPHÆRIA Sacc. — Syll. II p. 156, IX p. 825, XI p. 333, XIV p. 582, XVI p. 529, XVII p. 695.

1. *Metasphæria rubicola* Karst., Acta Soc. pro Fauna et Fl. fenn. 3975 XXVII (1905) p. 13. — Peritheciis gregariis, primo epidermide tectis, dein, ea secessa, liberis, sphæroideis, poro pertusis, atris, minutis; sporidiis longe fusoideis, curvulis, 4-6 guttulatis, hyalinis, circ. 40×3 .

Hab. in caulibus siccis Rubi idæi in regione Kuopioënsi, Kasurila Fennia (O. LÖNNBOHM).

2. *Metasphæria longispora* Kirschst., Verh. Bot. Ver. Brandenb 3976 XLVIII (1906) p. 54. — Peritheciis sparsis v. gregariis subcorticis sed cortice disrupta demum nudatis, sensim in ostiolum papilliforme tenuatis, nigris, coriaceis, usque ad 0,5 mm. diam.; ascis cylindraceo-clavatis, pedicellato-acutatis, supra rotundatis, $120-140 \times 5-7$, octosporis; sporidiis hyalinis, elongato-fusoideis, utrinque acutatis, multiseptatis (plerumque 10), non constrictis, $30-40 \times 4-5$; paraphysibus filiformibus, hyalinis.

Hab. in sarmentis Rubi fruticosi prope Rathenow Potsdam Germaniæ.

3. *Metasphæria viticola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3977 (1909) p. 377. — Peritheciis erumpenti-superficialibus valide papillato-ostiolatis, subconferte gregariis, sériatis, carbonaceis $150-180 \mu$. diam.; ascis clavulatis dense paraphysatis, breviuscule pedicellatis, $90-100 \times 8-12$, octosporis; sporidiis elongato-fusoideis, 3-5-septatis, septo medio constrictulis, $18-22 \times 5$, hyalinis, guttulatis.

Hab. ad sarmenta arida Vitis cordifoliæ in horto La Plata Argentina Amer. austr.

4. *Metasphæria Loniceræ* Fautr. — Syll. IX p. 335, XI p. 333 - f. 3978 Berberidis Rehm in Jaap, Ann. Mycol. (1908) p. 211.

Hab. in ramis tenellis Berberidis vulgaris, pr. S. Ulrich Tirolæ. — A typo in *Lonicera* morphologice vix differt.

5. *Metasphæria Dianthi* Rostr. Myk. Meddel. IX p. 311 (1905) in Bot. Tidskr. — Peritheciis sparsis, primo epidermide tectis, sphæroideis, atris 0,3 mm. latis; ascis tereti-clavulatis, breve stipitatis, paraphysatis, $70 \times 12-13$; sporidiis oblique monostichis, oblongo-

fusoideis, 4-septatis, ad septa constrictis, 24-28 \times 7-8, hyalinis, oculis guttulatis.

Hab. in caulibus Dianthi superbi, Sjælland, Flaskekroen Dania.

6. *Metasphæria Lyndonvillæ* Fairman, Ann. Mycol. IV (1906) p. 328. 3980

— Peritheciis sparsis, erumpenti-superficialibus, minutis, atris; ascis clavatis, apice late rotundatis, breve stipitatis, octosporis, 60-75 \times 15-16; sporidiis distichis, oblongo-fusiformibus, rectis vel curvulis, 4-7-septatis, subconstrictis, oculis 1-2-guttulatis, 30-35 \times 6-7 μ ., hyalinis.

Hab. in interiore leguminum Robiniæ Pseudacaciæ, Lyndonville N. Y. Amer. bor.

7. *Metasphæria leguminosa* Fairman, An. Mycol. IV (1906) p. 328, 3981

fig. 4. — Peritheciis sparsis, minutis, superficialibus, atris; ascis oblongo-clavatis, breve stipitatis, paraphysibus sursum tenuiter clavulato-incrassatis, 8-sporis, 60-70 \times 15-18; sporidiis distichis, lanceolato-fusoideis, primo granulosi et nucleolatis, deinde 7-septatis, oculis intermediis incrassatis, hyalinis, 20-23 \times 3-4.

Hab. in interiore leguminum Robiniæ Pseudocaciæ, Lyndonville N. Y. Amer. bor.

8. *Metasphæria Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 3982

(1908) p. 126. — Peritheciis subepidermicis densiuscule gregariis, lenticularibus, glabris, subcarbonaceis, ostiolato-papillatis, 150 μ . diam.; ascis cylindræis breviuscule pedicellatis, 120 \times 10, pseudo-paraphysibus paucis subfiliformibus granuloso-farctis commixtis; sporidiis elongato-ellipsoideis, triseptatis vix ad medium constrictis, hyalinis demum subchlorinis.

Hab. ad ramos languidos Illicis paraguariensis in silvosis circa Campo dos Cuías, Rep. Argentinæ Amer. austr.

9. *Metasphæria valdiviensis* Speg., Fungi Chilenses (1910) p. 73. — 3983

— Peritheciis numerosis, laxè gregariis, cortice insidentibus, epidermide velatis, lenticularibus, minutis, subcarbonaceis, ostiolo impresso perforatis, 150 μ . diam.; ascis subcylindræis brevissime crassiuscule noduloseque pedicellatis, octosporis, paraphysatis, 85-90 \times 14-15; sporidiis hyalinis ellipsoideo-fusoideis, 3-septatis, ad septum medium constrictis, mediocribus 26 \times 6.

Hab. in ramis siccis Perseæ Lingue, prope Ciudad de Valdivia, Chile Amer. austr.

10. *Metasphæria Coffeæ* Rehm, Ann. Mycol. VII (1909) p. 537. — 3984

— Peritheciis in epiphyllis dispersis, innatis demum convexo-pro-

minentibus, atris, poro pertusis, senilibus umbilicatis, sæpe margine tenuissimo nigrescente cinctis, 0,15 mm. diam.; ascis clavatis, apice rotundatis et incrassatis, $40-45 \times 15$, octosporis, J-; sporidiis fusiformibus v. subclavatis, utrinque acutatis, 3-septatis, hyalinis, $15-20 \times 5$, di-tristichis; paraphysibus filiformibus, septatis, 4 μ . cr.

Hab. ad folia Coffeæ arabicæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — Pseudostromate nigrescente ad *Hypospila* nutat.

11. *Metasphæria ericina* v. Tubeuf, in Rehm, Ann. Mycol. V (1907). 898 p. 541. — Peritheciis epiphyllis, gregariis, innatis, peridermio nigro tectis, globosis, poro conspicuo pertusis, glabris c. 250 μ . diam.; ascis oblongo-clavatis, sessilibus $80 \times 12-14$, 8-sporis; sporidiis fusoides, rectis, 3-septatis, ad septa subconstrictis, strato tenui mucoso obductis, hyalinis, $22-25 \times 6-7$, distichis; paraphysibus ramosis, septatis, hyalinis.

Hab. ad folia decidua Ericæ carneæ, Seiser-Alpe Tirolis austr. (Dr. v. TUBEUF).

12. *Metasphæria tetrasperma* Koord., Botan. Untersuch. (1907) p. 192, 898 fig. 17, II. — Peritheciis corticulis, tectis, globosis, ostiolo conico erumpente, coriaceis, glabris, 0,5 mm. diam., sparsis, atris; ascis cylindræis $60 \times 5,5$, tenui tunicatis, apice haud incrassatis, tetrasporis, paraphysatis; sporidiis oblique monostichis, hyalinis, fusoides-oblongis, utrinque acutis, $23-24 \times 5-6,5$, triseptatis; paraphysibus ascos superantibus, filiformibus, vix 1 μ . cr., hyalinis.

Hab. in cortice vulnerato Fici elasticæ prope Karangaja in ins. Java (KOORDERS).

13. *Metasphæria vagans* Feltg., Vorstud. Pilzfl. Luxembg. Nachtr. 898 IV (1905) p. 36. — Peritheciis gregariis cortice brunnescente insidentibus epidermide tectis, nigris, 100-150-200 μ .; ascis pisciformibus, octosporis, $54-70 \times 9-11$, paraphysibus filiformibus obsitis; sporidiis fusoides obtusulis, rectis v. curvulis, quadriguttulatis, uni- v. quadrilocularibus, ad septa non constrictis, $13-16 \times 3$ (immaturis).

Hab. in cortice sicco Ilicis Aquifolii, Höhenhof Luxemburgia.

14. ? *Metasphæria nigrescens* (Bonord.) Sacc. et Trav. - Syll. XX, 898 p. 78 - *Hercospora nigrescens* Bon. Handb. p. 63, t. III, fig. 72. — Peritheciis immersis, globulosis, discretis, ostiolo minuto erumpentibus, excipulo tenuissimo (nullo sec. Bon.) basi hypostromate

celluloso suffulto; ascis tereti-clavatis sensim tenuato-stipitatis, octosporis, apice rotundatis, paraphysibus ramosis obvallatis; sporidiis oblique monostichis oblongo-ellipsoideis, utrinque obtuse rotundatis, constricto-3-septatis, 4-guttulatis, hyalinis, dein in circum albidum expulsis.

Hab. in lignis, in Germania. Substantia lignea præcipue circa perithecia nigrescit. — Species dubia et vix *Metasphæria*.

15. *Metasphæria*? *Spegazzinii* Sacc. et Trott., *Metasphæria*? *Cocões* 3939

Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 375, non Petch — Peritheciis primo epidermide velatis eaque secedente denudato-subsuperficialibus, lenticularibus, 150-200 μ . diam., vix papillulato-ostiolatis, glabris; ascis subclavulatis breviter pedicellatis 100 \approx 16-18, aparaphysatis vel paraphysibus paucissimis cinctis, octosporis; sporidiis oblique distichis, primo didymis, biconoideis subnavicularibus, 4-guttulatis, 18-22 \approx 5-6, serius triseptatis, medio præcipue constrictulis, eguttulatis, semper hyalinis.

Hab. ad spathas aridas *Cocoës Romanzoffianæ* in hortis La Plata, Argentina Amer. austr.

16. *Metasphæria Cocoes* Petch, Ann. R. Bot. Gard. Peradeniya, IV 3990

Pt. V (1909) p. 304, non Speg. — Peritheciis 0,3 mm. diam., sphæroideis, gregariis, membranaceis, nigris, subcutaneis et epidermidem cinerescenscentem deique reticulatim sublevantibus; ostiolis minutis fere inconspicuis; ascis 260 \approx 15, utrinque attenuatis, apice rotundatis, breviter pedicellatis, octosporis; paraphysibus nullis; sporidiis oblique monostichis, fusoideis, curvatis, utrinque obtusis, hyalinis, multiseptatis, 85-100 \approx 5.

Hab. ad rhachidem foliorum *Cocoës nuciferæ*, Ceylon.

17. *Metasphæria Scindapsi* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3991

p. 389. — Maculis epiphyllis flavo-virentibus, subrotundatis, confluentibus, 2-5 cm. latis, non acute limitatis; peritheciis punctiformibus circinantibus, immersis, brunneis, 180 μ . diam., apice depressis, non prominentibus, minute ostiolatis; paraphysibus filiformibus demum mucosis; ascis breviter ovoideo-cylindraceis, basim versus crassioribus, apice angustatis obtusatis, medio 18-20 μ . lat., 70-80 μ . long., octosporis; sporidiis elongatis, levibus, hyalinis, quadrilocularibus, 38-42 \approx 5, rectis v. curvulis, utrinque angustatis.

Hab. in foliis *Scindapsi* specierum scandentium ad Gedeih in ins. Java.

18. *Metasphæria Puyæ* Speg., Fungi Chilenses (1910) pag. 72, cum 3992

icon. — Peritheciis subepidermicis laxè gregariis lenticulari-sub-

concoideis, vix papillato-ostiolatis, parvulis, atris, submembranaceis, 130-150 μ . diam.; ascis sublanceolatis, apice obtusis, elongato-sterilibus crasseque tunicatis, basi brevissime noduloseque pedicellatis, paraphysatis, 50-55 \times 16, octosporis; sporidiis subfusioideis, parum infra medium septato-constrictulis, loculo supero transverse bisepato, infero minore sæpius 1-septato tantum, hyalinis, 20 \times 5-6.

Hab. in foliis emortuis, putrescentibus Puyæ cærulescentis, Cerro S. Cristobal de Santjago, Chile Amer. austr.

19. *Metasphæria Aloës* Trinchieri, Rend. R. Ac. Sc. Fis. Mat. Na. 3993 poli (1909) fasc. 3-4 martio-aprili, p. 88. — Peritheciis valde copiosis, dense gregariis, subcutaneo-erumpentibus, globosis vel globoso-depressis, atris, poro pertusis, 159-232,5 μ . diam., 159-208 μ . altis; excipulo crasso, duro, subcarbonaceo; ascis cylindraceis, rarius cylindraceo-clavatis, apice rotundatis, subpedicellatis, 8-sporis, 53,5-98 \times 9,5-14,5; sporidiis distichis, elliptico-fusioideis, utrinque rotundatis, 3-5-septatis, ad septa, præcipue ad medium, fortiter constrictis, 17-24,5 \times 4,5-7, hyalinis, guttis 4-7-10 irregulariter dispositis, magnitudine varia; paraphysibus numerosissimis, manifestis, ascos subæquantibus, rectis curvulisque, basi breve articulationis incrassatisque, superne filiformibus acutiusculisque, hyalinis, 61-95,5 \times 4,5.

Hab. in scapis siccis Aloës plicatilis (L.) Mill., in Horto regio botanico neapolitano Ital. aust. (TRINCHIERI).

20. *Metasphæria Yuccæ* Earle, Bull. of the New York Bot. Gard. 3994 (1904) p. 293. — Peritheciis sparsis, nigris, prominentibus, longis, epidermide tectis, demum suberumpentibus, circ. 200 μ . diam., ostiolo inconspicuo, subpapillato; ascis ellipsoideis, circ. 75 \times 12; paraphysibus copiosis, filiformibus; sporidiis distichis, hyalinis, anguste ovoideis, apice acutis, 4-septatis, septis mediis fortiter constrictis, circ. 20 \times 6.

Hab. in foliis emortuis Yuccæ sp., Stanford Univ. Californ. Amer. bor. (C. F. BAKER).

21. *Metasphæria crassiuscula* Sacc. et Briard, Fl. de l'Aube p. 314, 3995 (1888), Berl. Icon. fung. I, p. 144, t. 160, fig. 3. — Peritheciis innatis, sparsis in areis pallidis plus minus approximatis, globulosis, $\frac{1}{6}$ - $\frac{1}{5}$ mm. diam., serius erumpentibus, breve papillatis; ascis crasse clavatis, brevissime noduloso-stipitatis, apice rotundatis, filiformi-paraphysatis, octosporis, 60-75 \times 20-24; sporidiis subdistichis, oblongo-ovoides, utrinque obtusis, 5-7-septatis, non v. vix constrictis, hyalinis, 22-26 \times 8-9, subinde inæquilateris.

Hab. in calamis putrescentibus Junci sp. pr. Gérosdot Gallie (P. HABIOT).

22. *Metasphæria sepalorum* Vleugel, Svensk Botan. Tidskr. II (1908) 3996 p. 369, fig. 2, a, b. — Peritheciis præcipue in pagina exteriori sepalorum dense gregariis, minutis, 0,4 mm. long. 0,3 mm. lat., sphæroideo-conoideis, papillatis, sessilibus, nigris, nitidis; ascis sphæroideo-cylindraceis, sursum paullo incrassatis, 70-92 \times 9-14; sporidiis distichis, oblongo-ellipsoideis, utrinque rotundatis, inaequalateralibus, 4-locularibus, medio leniter constrictis, 20-24 \times 7-8.

Hab. in sepalis emortuis Junci filiformis, in insul. Holmön, Suecia.

23. *Metasphæria Lepidospermatis* Mac Alp. Austral. Fungi, Dec. I-II, 89 p. 376 (Proceed. Linn. Soc. New. S. Wal. 1902). — Peritheciis dense seriatis, sæpius maculis nigris insertis, punctiformibus, nigris, membranaceis, poro pertusis, per stomata erumpentibus, 72 μ . diam.; ascis teneris fragilibusque, tereti-clavatis apice incrassatis rotundatisque, deorsum tenuatis, 86-90 \times 13-15, tenui-paraphysatis; sporidiis distichis elongato-fusoideis v. elongato-clavulatis, leviter curvis, typice 3-septatis, non constrictis, 25-26 \times 6,5-7, hyalinis demum submelleis, septo medio distinctiore.

Hab. in caule Lepidospermatis sp. Werribee Vic. Australiæ (C. FRENCH jun.).

24. *Metasphæria Staritzii* Rehm, Ann. Mycol. V (1907) p. 541. — 3996 Peritheciis gregariis immersis globulosis, glabris, nigris ostiolo minutissimo prominentibus, 100 μ . diam., contextu membranaceo fusco; ascis clavatis, 120 \times 15 octosporis; sporidiis fusiformibus rectis, transverse 5-7-septatis, haud constrictis, quaque cellula 1-guttata, hyalinis, 30-35 \times 6-7, distichis, paraphysibus paucis, septatis, 3 μ . cr.

Hab. ad folia Caricis hirtæ prope Ziebigk Dessau Germaniæ (STARITZ). — Pluribus speciebus caricicolis cognata, tamen ab omnibus bene distincta.

25. *Metasphæria Usteri* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3999 t. XV (1908) p. 23. — Maculis amphigenis, primo totis obscure sanguineis, parvis, dein longiusculis 10-30 \times 2-4 mm., pallidioribus subindeterminatis, centro arescenti-pallescentibus; peritheciis amphigenis in centro macularum sparsis, primo epidermide tectis dein erumpentibus, subglobosis, 90-120 μ . diam., ostiolo minuto vix papillato perforatis, tenui-membranaceis; contextu dense minuteque parenchymatico fuligineo; ascis e cylindraceo lenissime obclavulatis

60 \approx 12, apice obtuse rotundatis crasseque tunicatis, basi brevissime noduloseque pedicellatis, paraphysibus tenuibus longioribus densiusculis obvallatis; sporidiis oblique distichis, subfusiformibus, primitus subtorulosus grosse 6-guttulatis, dein 5-septatis, ad septum medium tantum constrictis, utrinque acutiusculis 20 \approx 4, hyalinis.

Hab. ad folia languida Sacchari officinarum in cultis, *Ercilia* Brasilis (USTERI).

26. *Metasphæria arenaria* B. R. S. in Sacc., Not. Myc. VI, Ann. 4000 Myc. v. III (1905) pag. 509. — Peritheciis globosis, subcarbonaceis, seriatim erumpentibus, 300 μ . diam., dehiscentibus, basi hyphis repentibus parce septatis, fuliginosis, 4 μ . cr., elongatis, scabris cinctis; ascis tereti-clavulatis noduloso-stipitatis, 90-150 \approx 14-16, octosporis; paraphysibus cohærentibus, articulatis, 5,5 \approx 7 μ . cr.; sporidiis distichis, lanceolato-fusoideis, initio 1-septatis, denique 3-septatis constrictisque, hyalinis, 39-42 \approx 6-6,5 loculis, 2-guttulatis.

Hab. in culmis Elymi arenarii, La Panne pr. Furnes et Knocke pr. Heyst, in Belgio (MARIA ROUSSEAU).

27. *Metasphæria Scirpi* Berl. Icon. Fung. I, p. 139, tab. 153, fig. 1, 4001 Sacc. Syll. II, pag. 59 (sub *M. vagans* Karst. f. *Scirpi* Sacc.) — forma *Phragmitis* Rehm, Ann. Mycol. V (1907) p. 541. — Peritheciis in maculis latis fuscidulis gregariis primitus innatis, dein semigloboso-prominentibus, globulosis, nigris, glabris, contextu parenchymatico, 0,3 mm. diam., poro minutissimo pertusis; ascis clavatis, apice rotundatis 4-8-sporis, 100-110 \approx 20; sporidiis fusiformibus, rectis, subobtusis, hyalinis, 3-septatis, 40 \approx 6-7, distichis; paraphysibus subramosis, hyalinis, 3 μ . crassis.

Hab. ad culmos putrescentes *Phragmitis* communis in lacu Staffelsee prope Murnau alpium Bavaris (Dr. REHM). — Præcipue a typo sporidiis eguttatis distincta.

28. *Metasphæria saccharicola* Speg., An. Mus. Nac. Buenos Aires 4002 t. XIX (1909) pag. 376. — Matrice tota sordide cinerescenti-infuscata; peritheciis laxè gregariis erumpenti-superficialibus subconoideis 150-180 μ . diam., minute sed acutiuscule papillato-ostiolatis; ascis subcylindræis, breviter pedicellatis 100-110 \approx 20, octosporis, paraphysibus paucis filiformibus obvallatis; sporidiis elongato-fusoideis, sæpius tristichis leviter curvulis, 45-50 \approx 7-8, 7-septatis, ad septa, ad medium validius, constrictulis, loculis grosse 1-guttulatis, diu hyalinis.

Hab. ad culmos dejectos putrescentes Sacchari officina-

rum in campis prope Ledesma, Argentina Amer. Austr. — Cum *Leptosphæria Spegazzinii* Syd. e Sacc. non comparanda.

29. *Metasphæria pamparum* Spegazz. An. Mus. Nac. Buenos Aires 4008 t. XIX (1909) p. 375. — Peritheciis innato-erumpentibus, in partibus sæpius arescenti-cinereis sparsis, subglobulosis 100-120 μ . diam., ostiolo carbonaceo non v. vix exerto coronatis; ascis cylindraceis, abrupte in pedicellum brevissimum nodulosumque contractis, 60-70 \approx 10-12, paraphysibus filiformibus longioribus parvis obvallatis, octosporis; sporidiis fusoidis 20-22 \approx 4, 7-septatis, tenuiter hyalino-tunicatis, guttulatis.

Hab. ad folia culmosque aridos Aristidæ ejusdam prope Colonia Juarez Celman Rep. Argentina Amer. austr.

30. *Metasphæria Equiseti* Jaap in Abhandl. Bot. Ver. Brandenb. LII 4004 (1910) p. 143. — Peritheciis gregariis, punctiformibus, nigris, immersis, epidermide tectis dein ostiolo prominentibus, globosis, 150-250 μ . diam., ostiolo obtuse conoideo; ascis cylindraceo-clavatis, supra attenuatis obtusisque, sessilibus, 50-70 \approx 8-9, tetrasporis; J -; sporidiis oblique monostichis, hyalinis, elongato-fusoidis, 17-22 \approx 4-5, bi- dein quadrilocularibus, guttulatis, loculo medio subbreuiore; paraphysibus hyalinis, septatis, curvis 3-6 μ . cr.

Hab. in caulibus vetustis Equiseti (*Heleocharidis*?) prope Triglitz in Germania. — Ob ascos tetrasporos prædistinguenda species.

31. *Metasphæria paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 4005 t. XV (1908) p. 23. — Maculis parvulis 3-4 mm. diam. determinatis suborbicularibus, ad hypophyllum sæpius epidermide vestitis, ad epiphyllum epidermide orbatis; peritheciis paucis in quaque macula, hypophyllis, e globoso-hemisphæricis, 120-150 μ . diam., papillulato-ostiolatis, contextu indistincte olivaceo; ascis antice attenuato-rotundatis, subcrassiuscule tunicatis, postice cuneatis, sensim in pedicello gracili attenuatis 60 \approx 6-7, paraphysibus conspicue longioribus, gracillimis densiuscule obvallatis; sporidiis rectis v. oblique distichis, non v. levissime curvulis, polo supero obtusiore infero acutiore, 10-12 \approx 2-2,5 ad septum non constrictis, primo 4-blastis dein triseptatis hyalinis.

Hab. ad folia languida coriacea ignota, Agua branca, Isolamento, Sao Paulo Brasilia (USTERI).

32. *Metasphæria javensis* v. Höhn., Stzb. K. Ak. d. Wiss. Wien 4006 CXVIII, Abt. I (1909) p. 328. — Peritheciis gregariis, immerso-prominentibus, subtus globosis supra conoideis, ostiolo rotun-

dato, nigris, 200-300 μ . latis, parietibus supra usque ad 40 μ . cr., nigro-brunneis, opacis, basi tenuioribus pallidis; paraphysibus numerosissimis filiformibus 2-3 μ . cr. non mucosis; ascis tenuiter tunicatis, medio latoribus supra subtruncatis, octosporis, basi in pedicellum breviter tenuatis, 110 \times 12; sporidiis submonostichis, hyalinis, tenuiter tunicatis, elongatis, utrinque subangustatis rotundatisque, subsexlocularibus, medio tenuiter tunicatis, non constrictis, 24-26 \times 6.

Hab. in cortice levi arborum, Tjiburrum prope Tjibodas in ins. Java.

34. *Metasphæria aquatica* Patouill., Bull. Soc. Myc. Fr. XXIV (1908) 4007 p. 10. — Peritheciis atris, innatis, globosis, circiter 120 μ . diam., ostiolo brevi obtuseque conoideo v. plus minus cylindraceo-elongato pertuso vix erumpente, tenuiter membranaceis carnosulis, pilis sparsis, brunneis, 3-4 μ . latis, septatis, flexuosis, mollibus, parenchymate thalli radiantibus vestitis; ascis cylindraceis, apice rotundatis deorsum attenuato-stipitatis 110-130 \times 20, paraphysatis, 8-sporis; sporidiis subdistichis rectis, fusoides, hyalinis, utrinque obtusis, triseptatis, ad septa constrictis, 30-38 \times 9-10, sæpius 4-guttulatis.

Hab. in thallo vivente *Lemaneæ*, Ain Juræ. — Cum statu pycnidico sæpe consociata.

35. *Metasphæria* (subg. *Sagediopsis* Sacc.) *nephromiaria* (Linds.) Sacc. 4008 et Trott., *Microthelia nephromiaria* Linds. Lichenic. Microf. pag. 539, t. XXIV, fi. 1-2. — Peritheciis punctiformibus, semiimmersis, nigris, globulosis, laxe gregariis; ascis fusoides-saccatis, crebro filiformi-paraphysatis, octosporis; sporidiis laxe 2-3-stichis, oblonge fusoides, rectis, utrinque obtusulis, 3-septatis, non constrictis, hyalinis, circ. 18-20 \times 4-5.

Hab. in thallo et apotheciis *Nephromii cellulosi*, Hermte Island et *Neuropogonis Taylorii*, Kerguelen Island.

- EUDARLUCA** Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 22 (Etym. *eu* bene et *Darlucæ*, h. e. status perfectus *Darlucæ*). — Perithecia e globoso lenticularia, parenchymatica, glabra, ostiolata; asci cylindracei, paraphysati, octospori; sporidiis cylindraceo-fusoides, hyalinis v. fumosis, 2-septatis. — Genus pulchellum in *Uredinibus* (an semper?) parasiticum, statum ascophorum *Darlucarum* proferens.

1. *Eudarlucā australis* Spegazz. l. c. fig. E. — Peritheciis 3-5-gre- 4009
gariis erumpentibus, nigris, glabris, 80-100 μ . diam., impresso-
ostiolatis coriacellis, contextu circa ostiolum atro, opaco, ambitu
pellucido, minute denseque pseudoparenchymatico fuligineo (non
cyaneo!); ascis antice obtusis rotundatis crassiusculeque tunicatis,
postice breviter cuneatis in pedicellum brevissimum crassiusculum
productis, paraphysibus filiformibus longioribus obvallatis, 60 \times 10,
octosporis; sporidiis oblique distichis, 16-20 \times 4, ad septa lenissime
constrictulis, loculo medio sæpius leniter tumidiore, primo hyali-
nis serius fumosis, utrinque acutiuscule rotundatis, rectis v. lenis-
sime inæquilateralibus.

Hab. in Uredine Cannæ Wint. ad folia Cannæ cujus-
dam in hortis Sao Paulo, Brasilia (USTERT).

MASSARINA Sacc. — Syll. II p. 153, IX p. 824, XI p. 332, XIV
p. 586, XVI p. 535.

1. *Massarina plumigera* (Ell. et Ev.) Sacc. et Trott., *Massaria plu-* 4010
migera Ell. et Ev. North Amer. Pyren. (1892) p. 404. — Peri-
theciis sparsis, depresso-globosis, 0,75 mm. circ. latis, subepider-
micis et ostiolo breviter conoideo v. cylindraceo subprominulis;
ascis oblongo-clavatis, breviter stipitatis, 130-150 \times 22-25, octo-
sporis, paraphysatis; sporidiis inordinatis, oblongo-cylindraceis,
hyalinis, 3-septatis, 55-60 \times 12.

Hab. in foliis emortuis Viburni Lentaginis, Newfield
N. Y. Amer. bor.

2. *Massarina polycarpa* (Füist.) Sacc. et Trav. - Syll. XX, pag. 32, 4011
Massaria polycarpa Füisting., in Bot. Zeitung (1868) p. 386, t. VII,
f. 3-4. — Peritheciis globoso-lenticularibus, immersis peridermio
pustulatim elevato tectis, 600-800 μ . lat., 400 μ . alt., non papil-
latis, sed ostiolo latiusculo erumpentibus; ascis clavatis, amplis,
150-200 \times 20, paraphysibus filiformibus copiosis obvallatis; spori-
diis subdistichis fuscoideis, 4-cellularibus, 30-36 \times 8-12, crassiuscule
tunicatis, hyalinis, loculis subæqualibus.

Hab. in ramis corticatis Coryli Avellanæ pr. Münster,
Germania.

3. *Massarina salicicola* Rehm, Ann. Mycol. IV (1906) p. 397. — 4012
Peritheciis arcte congregatis, sub epidermide longe fuscata inna-
tis eamque hemisphærice elevantibus, papillula minutissima demum
prominente, globulosa, 0,3 mm. diam., glabra, excipulo submem-
branaceo, fusco, parenchymatice contextu; ascis cylindraceo-clava-

tis, apice rotundatis, crasse tunicatis, 90-120 \times 14-16, octosporis; sporidiis fusoides, triseptatis, ad septa subconstrictis, quaque cellula 1-2 magni-guttata, hyalinis, strato mucoso lato obductis, 18-24 \times 5-7, distichis; paraphysibus filiformibus, septatis.

Hab. ad ramum emortuum *Salicis* sp., Dechbetten prope Ratisbonam Germania.

KOORDERSIELLA v. Höhn. *Fragm. Mykol.* VII (1909), Sitzb. K. Ak. d. Wiss. Wien, CXVIII, Abt. I, p. 833. — (Etym. a Doct. S. A. KOORDERS, stirpium javanicarum scrutatori). — Perithecia omnino superficialia, mollia, carbonaceo-coriaceo-carnosa, ostiolo distincto prædita; asci clavati paraphysati; sporidia hyalina, multiseptata.

1. *Koordersiella javanica* v. Höhn. l. c. p. 833. — Peritheciis solita-
riis, sparsis, in hypothallo tenuissimo insidentibus, nigris, extus sub-
carbonaceis intus carnosio-coriaceis, globoso-depressis subdiscoideis,
170-240 μ . latis, 120 μ . altis, extus verruculoso-rugosis; ostiolo
depresso, 16 μ . lato, zona levi pallidiore circumdato; parietibus
perithecis pluries stratosi, parenchymaticis, intus hyalinis extus
nigrantibus, 15-45 μ . cr., ascis tenuiter tunicatis, sessilibus, fusoi-
deo-clavatis, supra obtusulis crassiusque tunicatis, 4-8-sporis, 42-
45 \times 17; paraphysibus numerosis, crassis, ascos superantibus, mu-
cosis; sporidiis distichis vel tristichis, tenuiter tunicatis, fectis v.
vix curvulis, cylindraceo-fusoides, utrinque rotundatis v. breviter
acutato-apiculatis, hyalinis, 4-8-sporis, 24-28 \times 4-6.

Hab. in foliis *Urostigmatidis* Vogelii, Tjeukumeh prope Buitenzorg in ins. Java. — In hoc gen., observante cl. v. Höhn-
nel, inscribendæ sunt verisimiliter etiam *Winterina lobata* (Tr. et
Earl.) et *W. acanthostigmoides* Rehm.

ZIGNOËLLA Sacc. — Syll. II p. 214, IX p. 860, XI p. 339, XIV
p. 587, XVI p. 536, XVII p. 709.

1. *Zignoëlla anonicola* Speg., An. Mus. Nac. Buenos Aires t. XIX
(1909) p. 376. — Peritheciis ligno denudato leniterque dealbato
gregarie insidentibus, globulosis, 150-200 μ . diam., subprominulis
ostiolo sublophiostomaceo donatis; ascis cylindraceis vix pedicel-
latis, 75-90 \times 8-10, paraphysibus filiformibus vix longioribus ob-
vallatis, octosporis; sporidiis ellipsoideo-biconoideis, didymis, trise-
ptatis, eguttulatis, semper hyalinis, 15-20 \times 5-6.

Hab. ad cicatrices ramorum *Anonæ* Cherimoliæ in hortis
prope Tucuman, Argentina, Amer. austr.

2. *Zignoëlla Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 4015 (1908) pag. 125. — Substrato sordide pallide irregulariterque fusco-nigrescente; peritheciis lenticulari-subconoideis 150 μ . diam., atris, glabris, levibus, opacis, basi insculptis, papillato-ostiolatis, carbonaceis; ascis fusoides-clavatis modice attenuato-pedicellatis, 100-120 \times 14-15, octosporis, paraphysibus filiformibus longioribus cinctis; sporidiis subfusoides oblique distichis, triseptatis, lenissime constrictis, hyalinis, sæpius leniter inæqualateralibus, 24-25 \times 8.
Hab. in ligno decorticato cicatricum truncorum *Ilicis* *paraguarie* secus rivulum Matto Queimado, Argentina, America austr.
3. *Zignoëlla lichenoides* v. Höhn. Stzb. k. Ak. d. Wiss. Wien CXVIII 4016 Abt. I (1909) p. 331. — Peritheciis superficialibus, sed basi in stromate nigricante arcte adnato, tenuiter crustiformi insidentibus, seriatis v. solitariis, lateraliter unitis, sessilibus, globosis, coriaceo-carbonaceis, nigris; nitidulis, supra minute ostiolatis, 360-470 μ . lat. et altis, parietibus 50-60 μ . cr.; ascis numerosis, clavatis, stipitatis, supra rotundatis crasse tunicatis, 120 \times 13-14, octosporis, paraphysibus numerosissimis, ascos superantibus, ramosis, mucosis, crasse filiformibus; sporidiis hyalinis, subdistichis, crasse tunicatis, triseptatis, ellipsoideis, 22 \times 9, grosse quadriguttulatis.
Hab. in cortice ramorum *Albizziæ* *moluccanæ*, in horto botanico Buitenzorg in ins. Java. — *Z. omphalostomæ* Penz. et Sacc. et *Z. Cæsalpinie* Zimm. affinis.
4. *Zignoëlla arthopyrenioides* Rehm in Hedwigia XXVIII (1889) 4017 pag. 355. — Peritheciis atris, sparsis, in superficie ligni dealbata sessilibus, hemisphæricis, rotundatis v. subcompressis, haud papillatis, poro perspicuo pertusis, 200-300 μ . diam.; ascis ovoideis v. clavatis, crassis, 50-60 \times 24-30, octosporis; sporidiis fusoides, obtusis, rectis, 2-(4-) locularibus, grosse guttulatis, medio valde constrictis, hyalinis, 15-20 \times 6-7, distichis; paraphysibus filiformibus, 1,5 μ . cr., hyalinis; J.—
Hab. ad radices emortuas, decorticatas *Callunæ* vulgaris juxta Stuibenfall ad Plansee Tirolia.
5. *Zignoëlla ovoidea* (Fr.) Sacc. — Syll. II p. 215 - var. *subcorticalis* 4018 Feltg., Vorst. Pilz. Fl. Luxemb. IV (1905) pag. 69. — Peritheciis subcorticalibus (demum erumpentibus?) dignoscitur.
Hab. sub cortice *Betulæ*, Baumb.-Siebendr. in Luxemburgia. — A *Z. subcorticali* Cooke diversa. — Var. *runsalsensis* Karst. Symb. mycol. XIII, p. 6, Berl. Ic. fung. I, p. 99, tab. 91, f. 2.

— Peritheciis gregariis, minutis $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam.; ascis 45-55 \times 8-10; sporidiis 14-18 \times 4-5. — In ligno quercino sicco, Run-sala Fenniae. Potius *Zign. punctiformi* affinis.

6. *Zignoëlla sinapisperma* (Rebenth.) Sacc. et Trav. - Syll. XX, 4019 p. 1172, *Sphaeria sinapisperma* Rebenth. in Hoffm. Icon. anal. fung. p. 98, t. 23, f. 1, 6. — Peritheciis nigris, punctiformibus, nunc dense nunc laxe gregariis, globulosis, superficialibus, apice obtusis; ascis clavatis, breve stipitatis filiformi-paraphysatis, octosporis; sporidiis fusiformibus, utrinque attenuatis, medio septatis, non constrictis, hyalinis, 25 \times 4.

Hab. ramis in dejectis emortuis *Quercus* pr. Gross-Gerau Germaniae, socia *Phaeodiscula pezizoide* (Rebenth.) Sacc. et Trav. — Ubi sporidia semper didyma maneant potius *Melanopsamma*.

7. *Zignoëlla anceps* Sacc. Ann. Mycol. VI (1908) p. 564. — Peri- 4020 theciis laxe gregariis e basi adnata superficialibus, globoso-conoideis, obtusis, carbonaceis, nigris, glabris, breve papillatis et papilla amissa anguste perforatis, 300 μ . diam.; ascis cylindraceis, breve noduloso-stipitatis, apice obtusulis, 115-135 \times 18, octosporis; sporidiis distichis, fusoides, utrinque obtusulis, leniter curvis, 3-septatis, ad septum medium leviter constrictis, 4-guttulatis, hyalinis, 40 \times 10.

Hab. ad corticem radices *Ostrya virginicae*, Lyndonville N. Y. (FAIRMAN). — Affinis *Z. sequanicae* sed perithecia basi applanato-adnata, *Z. Sequoiae* sed maculae matricis nullae. Ad subg. *Trematostoma* spectat.

8. *Zignoëlla? claypolensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4021 (1909) p. 377. — Peritheciis dense aggregatis per peridermium irregulariter fissum erumpentibus, carbonaceis, glabris, 150-180 μ . diam.; ascis clavulatis breviter pedicellatis paraphysatis, octosporis, 80-90 \times 12; sporidiis distichis fusideo-biconoideis utrinque subacutiusculis, 20-25 \times 6, maturis 3-septatis, hyalinis (an postremo 5-septatis atque chlorinis?).

Hab. ad ramos aridos *Casuarinae* strictae, Claypole prope Buenos Aires, Argentina, America austr.

9. *Zignoëlla Abietis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII, 4022 Abt. I (1909) p. 332. — Peritheciis superficialibus plus v. minus gregariis, saepe plagulas late effusas formantibus, hyphis brunneis 3-4 μ . cr. intermixtis; peritheciis globosis, breviter conoideo-ostiolato-papillatis, carbonaceis, levibus, nitidulis, fragilibus, 180 μ . circ. latis, glabris v. basi setulis parcis, brunneo-violaceis, septatis, le-

vibus, obtusis, $200 \approx 3-4,5$ tectis; paraphysibus numerosis, filiformibus, tenuiter tunicatis, 3 μ . cr.; ascis clavatis, utrinque attenuatis, plerumque $80-90 \approx 10$, raro usque ad $120 \approx 8$, octosporis; sporidiis distichis, fusioideis, utrinque acutis, semper quadrilocularibus, hyalinis, quadriguttulatis, $26-32 \approx 3-4$.

Hab. in cortice putri Abietis in Wienerwalde Austriæ inf. — *Z. Britzelmayri*, *Z. crustaceæ*, *Z. macrosporæ* affinis. Status conidicus adest: *Acrotheca Zignoëllæ* v. Höhn. n. f.

10. *Zignoëlla palmicola* P. Henn., Engl. Jahrb. XXXVIII (1905) 4023 p. 126. — Peritheciis innato-superficialibus, gregarie sparsis, hemisphaerico-conicis, obtuso-papillatis, cinereo-fuscis, c. $300-350 \mu$. diam.; ascis fusioideo-clavatis, apice tunicatis, subobtusis, octosporis, $90-110 \approx 7-10$, paraphysibus mycelioides, hyalinis; sporidiis oblique monostichis v. subdistichis, oblonge fusioideis, rectis vel curvulis, utrinque acutis, medio 1-septatis dein 3-septatis, hyalino-cyanescentibus, $30-40 \approx 4-5$.

Hab. in foliis Palmarum, Kamerun Africæ centr. (ZENKER).

11. *Zignoëlla texticola* Vouaux in Bouly de Lesdain, Bull. Soc. bot. France LVI (1909) p. 5. — Peritheciis gregariis, semiimmersis, nigris, $0,2-0,5$ mm. diam., poro simplici; ascis cylindraceo-clavatis, breviter stipitatis, $80 \approx 10-11$, octosporis, paraphysatis; sporidiis elongatis, hyalinis, 4-guttatis, constricto-1-septatis, utrimque obtusiusculis, initio muco crasso hyalino obvolutis, deinde nudis, $24-28 \approx 6-7$.

Hab. in tela cera illita, Versailles et tela bitumine illita in prato dejecta pr. Dunkerque Galliae.

12. *Zignoëlla longispora* Rehm, Oesterr. Bot. Ztschr. LVI (1906) 4025 p. 294. — (Nomen nudum).

Hab. in ramulis siccis Rhododendri ferruginei, Alpeiner. - Alpe Stubai Austria.

MELOMASTIA. Nits. et Fuck. — Syll. II p. 213, XVII p. 707.

1. *Melomastia shastensis* Earle, Bull. of the New York Bot. Gard. 4026 (1904) p. 292. — Peritheciis sparsis vel gregariis, ligno infossis plus minus compressis, nigris, collabescentibus, $0,3-0,5$ mm. cr., ostiolo depresso-perforato; ascis cylindraceis, $70-80 \approx 10-12$; paraphysibus filiformibus; sporidiis subdistichis, irregulariter oblongis v. anguste ovoideis, hyalinis, 3-4-septatis, non constrictis, loco medio sæpe leniter inflato, circ. $25 \approx 5-6$.

Hab. in ligno decorticato *Abietis shastensis*, Mt. Shasta Calif. Amer. bor. (COPELAND).

2. *Melomastia lignicola* Kirschst. in Jaap, Abh. bot. Ver. Prov. 4027 Brandenb. LII (1910) p. 139. — (Nomen nudum).

Hab. in ramis siccis *Betulæ albæ* prope Triglitz in Germania.

ORANIELLA Speg., An. Mus. Nac. Buenos Aires, t. XIX (1909) p. 378 (Etym. e loco *Oran*). — Perithecia sparsa cortice v. ligno omnino immersa, ostiolo papillato vix emergentia, majuscula; asci cylindracei, octospori, paraphysati; sporidia monosticha cylindracea 3-septata hyalina. — Genus *Melomastiæ* peraffine videtur.

1. *Oraniella coffeicola* Speg. l. c. p. 378, cum. icon. — Peritheciis 4028 globulosis 0,5-1,25 mm. diam.; ascis 180-250 \times 7-10; sporidiis cylindraceis, rectis v. vix inæquilateralibus v. subcurvulis, 24-30 \times 6-8, 3-septatis, ad septa omnia constrictulis, loculis grosse 1-guttulatis, semper hyalinis.

Hab. ad ramos vetustiores *Coffeæ arabicæ* prope Orán, Jujuy, Argentina, Amer. austr. — Jodi ope obturaculus minutissimus ascorum leniter cærulescit.

WINTERINA Sacc. em. — Syll. IX p. 909, XIV p. 589, XVI p. 538, XVII p. 708.

1. *Winterina peltigerophila* Rehm, Ann. Mycol. VI (1908) pag. 323. 4029 — Peritheciis in pagina superiore *Peltigeræ* dilutissime cinescente vel nigrescente dispersis, sessilibus, atris, globulosis, poro minutissimo pertusis, contextu parenchymatico fusco, 100-150 μ . diam., glabris; ascis clavatis, apice rotundatis, 80 \times 15, octosporis; sporidiis fusoideis, utrinque subacutatis, transverse 5-septatis, hyalinis, 20 \times 5 distichis; paraphysibus, tenerrimis, septatis, ca. 2 μ . crassis.

Hab. in superficie *Peltigeræ* in Germania. — Ex herb. Fückel in herb. Barbey-Boissier (sub *Abrothallo*). — Jodi ope hyemenium vinose rubens. — A *Leptosphaeria rivana* et *Metasphaeria leptogiophila* probe distinguenda.

ACANTHOSTIGMA De Not. — Syll. II p. 207, IX p. 854, XI p. 337, XIV p. 590, XVI p. 539, XVII p. 712.

1. *Acanthostigma Gnaphaliorum* Speg., An. Mus. Nac. Buenos Aires 4030 t. XIX (1909) p. 375. — Maculis nullis; peritheciis hinc inde la-

xissime gregariis, superficialibus, ex hemisphærico subconoideis 70-125 μ . diam., nigris, setulis radiantibus v. erectis, unicellularibus fumosis 100-200 \times 4-5 subdensiuscule armatis; ascis cylindraceis brevissimeque pedicellatis, octosporis, aparthysatis, 50-55 \times 8-10; sporidiis oblique distichis, rectis v. lenissime subinequilateralibus utrinque acutiusculis 18-20 \times 3-4, 3-septatis, ad septa leniter constrictis, primo hyalinis serius obsolete fumosis.

Hab. ad folia viva *Gnaphalii purpurei* in pratis Ensenada prope La Plata, Argentina, Amer. austr.

2. *Acanthostigma rubescens* Rehm, Ann. Mycol. VII (1909) p. 536. 4081

— Peritheciis in maculis hypophyllis late rosaceis dispersis, inter pilos nidulantibus, folii conideo-globosis, imprimis versus apicem setis fuscis acutis, rectis, c. 30-40 μ . long. 3-4 μ . cr. obsessis, parenchymatice e cellulis permagnis fuscis contextis, 100 \times 90; ascis clavatis, ad apicem rotundatis, sessilibus, 45-48 \times 8-9, octosporis sporidiis fusiformibus, 3-5-septatis, hyalinis, 12-15 \times 3, distichis; paraphysibus filiformibus.

Hab. in foliis *Solani hypoleuci*, Sao Leopoldo Rio Grande do Sul Brasilæ (THEISSEN).

3. *Acanthostigma Lantane* Theiss., Beih. Bot. Centralbl. Bd. XXVII 4082

(1910) Abt. II, pag. 397. — Maculis nullis; peritheciis in hypophyllo numerosissimis dispersis, in epiphylo rarioribus, globosis v. obovatis, inter pilos folii nidulantibus, grosse parenchymatice contextis, 200-240 μ . diam., papilla obtusa, hyphis longis, fuscis, flexuosis, septatis, 5-6 μ . crassis, hinc inde conidiferis obsitis; ascis clavatis, modice pedicellatis, p. sp. 85-120 \times 20-26, crasse tunicatis; sporidiis oblongis, maturis intense viridibus, 3-septatis, utrinque (imprimis apice infero) angustatis, ad septum medium constrictis, minus ad reliqua septa, uniguttulatis, polystichis, 32-45 \times 8-9.

Hab. in foliis vivis *Lantane*, Sao Leopoldo Rio Grande do Sul Brasilæ (H. DIECKMANN).

4. *Acanthostigma subnivale* Rehm, Ann. Mycol. V (1907) p. 539. — 4088

Peritheciis gregariis sessilibus, globulosis, ad basim hyphis fuscis insidentibus, vertice setis plurimis, rectis, acutis, fuscis, 50 \times 5, vestitis, contextu parenchymatico, c. 300 μ . diam.; ascis clavatis, apice rotundatis, 70 \times 10-12, octosporis; sporidiis oblongo-clavatis, utrinque rotundatis, transverse 3-septatis, medio subconstrictis, hyalinis, 15 \times 5, distichis; paraphysibus ramosis.

Hab. in hypophyllo folii *Graminis* inter *Rhododendra*

ferruginea in albis supremis vallis Zillertal Tiroliae (Dr. REHM). — Affine *A. Alni* et *A. parasitico*.

5. *Acanthostigma Bambusæ* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4084 CXVIII, Abt. I (1909) p. 334. — Peritheciis superficialibus, plerumque singulis v. 2-5 gregariis, in maculis effusis nigricantibus, subvelutinis insidentibus, nigris, carbonaceis, nitidulis, globosis, supra rotundatis v. depresso ostiolato-papillatis, 210-280 μ . diam., ostiolo rotundato 20 μ . lato. supra levibus, basi setulis sparsis, nigris, septatis, obtusulis, apice pallidioribus 200-250 \times 6-7 tectis; paraphysibus numerosissimis, filiformibus, 4 μ . cr.; ascis octosporis, 100-130 \times 15-20, sessilibus v. brevissime noduloseque pedicellatis, tenuiter tunicatis, clavato-fusoideis, supra conoideo-angustatis obtusulis, J.-; sporidiis distichis v. tristichis, hyalinis, plerumque 12-locularibus, 51-54 \times 7, fusoideis, apice obtusulis.

Hab. in vaginis putrescentibus *Bambusæ* sp. in Hort. bot. Buitenzorg in ins. Java. — Status conidicus adest: *Acrothecium Bambusæ* v. Höhn.

6. *Acanthostigma genuflexum* (v. Höhn.) Sacc. et Trott., *Acanthostigmella genuflexa* v. Höhn., Ann. Myc. III (1905) pag. 328. — Peritheciis superficialibus, sparsis, globosis v. globoso-ovoideis, tenui-membranaceis, nigro-brunneis, apice carbonaceis, 70-80 μ . lat., 100 μ . alt.; ostiolo setuloso, setulis 2-10 robustis, brunneo-nigris, acutis, septatis, 60-80 \times 4-5, raro levi v. subpiloso; ascis supra angustatis, clavatis, 30-35 \times 8, octosporis; sporidiis pluriseriatis, chlorinis, in massa pallide olivaceis, elongatis v. fusoideis, utrinque obtusule tenuatis, 2-septatis, loculo medio plerumque latiore, 8-14 \times 2-3,5.

Hab. in culmis putrescentibus *Phragmitis communis* prope Tulln Austriae inf. — Socium adest *Helicosporium Phragmitis* v. Höhn. forsitan metagenetice connexum. — *Acanthostigmella* v. Höhn. a typo videtur vix recedere ostiolo particulatim setuloso.

7. *Acanthostigma orthosetum* (v. Höhn.) Sacc. et Trott., *Acanthostigmella orthoseta* v. Höhn., Fragm. z. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1201. — Peritheciis nigris, arcte gregariis, plerumque seriatis, superficialibus, 100-160 μ . latis, 100-120 μ . altis, infra globosis, tenuiter membranaceis, parenchymaticis, hyphis brunneis, septatis, 2-3 μ . latis tortuosis tectis, supra conoideis in discum 80 μ . latum subrotundum opacum desinentibus; ostiolo in centro disci subrotundo 15 μ . diam. præ-

ditis, setulosis, setulis circulariter pluriseriatis, 60-100 \approx 5-5,5, interdum brevioribus; ascis aparaphysatis copiosis tenui-tunicatis sessilibus, fusoideo-clavatis, octosporis 40-52 \approx 8; sporidiis 2-3-seriatis ex hyalino pallide olivaceis, fusoideis, utrinque acutis, quadricellularibus 4-5 guttulatis, non constrictis, 15-20 \approx 3-4, articulo uno v. binis intermediis paullo crassioribus.

Hab. in caulibus siccis *Heraclei* sp. ut videtur, Sonntagsberg Austria inf. (STRASSER).

8. *Acanthostigma glaciale* Rehm, Oest. Bot. Zeitschr. LVI (1906) 4087 p. 294. — (Nomen nudum).

Hab. in foliis Graminacearum, Zillertal sub Pfitscherjoch Tirolia. — An idem ac *Ac. subnivale* n. 4?

LASIOSPHÆRIA Ces. et De Not. — Syll. II p. 505, IX p. 969, XIV p. 638, XVII p. 576, XVII p. 790.

1. *Lasiosphæria subambigua* v. Höhnelt, Ergebn. Bot. Exp. Südbros. 4088 1901, Denk. k. Ak, d. Wiss. Wien, Bd. LXXXIII (1907), Extr. pag. 23. — Peritheciis superficialibus, gregariis, membranaceo-carbonaceis, supra subconoideis glabris, ceterum setulis acutis, nigris, opacis, 120 \approx 7-12, nonnullis brunneis translucidis, septatis, usque ad 160 \approx 6 immixtis crebre tectis, 350-400 μ . lat. 500-600 μ . altis, basi hyphis brunneis septatis 4-6 μ . cr. præditis; paraphysibus numerosis, filiformibus, mucosis; ascis clavatis, longe pedicellatis, 140-180 \approx 8, octosporis, supra obtusis et guttula pallida præditis; sporidiis distichis, inasco hyalinis, contortis, unilocularibus, extus maturantibus 2-4-locularibus, supra ellipsoideis brunneis, infra subhyalinis et vermiformi-incurvatis, utrinque breviter hyalino-appendiculatis, 40-44 \approx 4-5.

Hab. in stipite putri Palmarum, Alto da Serra prope Santos, Sao Paulo, Brasilia. *Las. ambigua* Sacc. affinis.

2. *Lasiosphæria Rickii* Theiss., Beih. Bot. Centralbl. Bd. XXVII 4089 (1910) Abt. II, pag. 398. — Peritheciis gregariis, plerumque arcte aggregatis crustamque fere continuam efformantibus, sessilibus, globosis, 700-800 μ . diam., atris, asperis, verrucis crassiusculis conicis setosis obsitis, carbonaceis; setis sparsis ex hyphis fasciculatis, fuscis, 4-5 μ . cr., septatis compositis; ipsa peritheci cavitate c. 400-500 μ . diam.; ascis longe cylindraceis, rarius subclavatis, apice angustatis et truncatis, lumine nodulose incrassato, inferius abrupte in pedicellum tenuissimum longiusculum productis, p. sp. 115-160 \approx 10-13 (rarius ventricosus c. 100 \approx 18); para-

physibus flexuosis filiformibus tenerrimis, 0,5-1 mm. cr., ascos superantibus, laxis; sporidiis oblique distichis v. polystichis, hyalino-flavidis, plerumque curvulis, oblongo-fusoideis, demum 3-septatis, non constrictis, 40-52 \times 4-5, supra rotundatis, infra breviter (3-5 μ .) acuteque hyalino-rostratis.

Hab. ad ramos emortuos, Sao Leopoldo Rio Grande do Sul Brasilæ (J. Rick).

3. *Laiosphæria*? *epimyces* Spegazz., An. Mus. Nac. Buenos Aires 4040 t. XIX (1909) pag. 403. — Peritheciis superficialibus densissime gregariis globulosis, 200-300 μ . diam., papilloso-squarrulosis, nigris; ascis fusoideis apice subtruncatis deorsum breviter attenuatopedicellatis, 120-130 \times 15-18, octosporis, pseudoparaphysatis; sporidiis cylindræis 3-septatis, primo hyalinis dein fuliginæis, 50-55 \times 5-6.

Hab. ad hymenium nec non pileum Polypori radicati? in silva Bobadal Jujuy, Argentina, Amer. austr. — Species habitu sporarumque juvenilium fabrica eximie cum *Laiosphæria* conveniens sed sporidiis postremo deminutis fuliginæisque recedens et novi generis typum (*Aulospora epimyces* Speg.) certe sistens.

4. *Laiosphæria polyporicola* P. Henn., Hedw. XLV (1905) p. 28. — 4041 Peritheciis superficialibus, aggregatis vel sparsis, membranaceo-coriaceis, atro-fuscis, globulosis v. ovoideis, ruguloso-tuberculatis c. 250-300 μ . diam., pilis sparsis atro-brunneis, septatis, flexuosis, c. 3,5-4 μ . cr. vestitis; ostioliis obsoletis; ascis fusoideo-cylindræis, breve stipitatis, apice rotundato-applanatis, 8-sporis, 150-170 \times 12-18; paraphysibus copiosis mycelioideis, flexuosis, hyalinis, c. 1 μ . cr.; sporidiis subdistichis v. subtristichis, cylindræo-vermicularibus, utrinque rotundatis, interdum rostratis, hyalinis, pluriguttulatis, 3-septatis, 50-60 \times 4-6.

Hab. in Polyporo adusto prope Michailowskoe Rossia.

5. *Laiosphæria hirsuta* (Fr.) Ces. et De Not. — Syll. II, p. 191 — 4042 f. *parasitans* Rehm, Ascom. exsicc. fasc. 43 n. 1807 et Annales Mycol. VII (1909) pag. 136. — A typo differt peritheciis plus minus globosis, nec conoideis, pilis plerumque rectis, brunneis, nec acutis, usque ad 300 \times 5-6 tectis; sporidiis flavidis, denique brunneis, 8-ocularibus, 50 \times 5-6.

Hab. in Polyporo in trunco Pini, Weimar Ettersberg (DIEDICKE).

6. *Laiosphæria ambigua* Sacc. — Syll. II p. 197 — var. *carbonaria* 4043 Rick, Broteria IV (1905) p. 161. — Sporidiis junioribus ea Bom-

bardiae fasciculatæ, maturis vero ea *Sordariæ coprophilæ* imitantibus.

Hab. in areis carbonariis, Torres Verdas Lusitaniæ. — An potius *Sordariæ* sp.?

7. *Lasiosphæria aristata* (Quél.) Sacc. et Trav. — Syll. XIX p. 1053, 4044
Lasiella aristata Quél Champ. Vosges, III (1875) p. 518, t. IV, f. 27. — Peritheciis conico-hemisphæricis, minutis, nigris, pilis rigidulis, divaricatis, nigris laxiusculis conspersis, ostiolo punctiformi; sporidiis cylindræis, obtusis, triguttulatis, 8 μ . long.

Hab. in culmis exsiccatis graminum in Gallia. — Adsunt pycnidia: sporulis oblongo-fusoideis, guttulatis, utrinque aristatis. Species ex diagnosi et icone omnino dubia.

8. *Lasiosphæria culmorum* Miyake et Hara, Bot. Mag. Tokyo (1910) 4045 p. (337) [japonice].

Hab. in culmis *Bambusæ* sp. in Japonia.

9. *Lasiosphæria ovina* (Pers.) Ces. et De Not. — Syll. II, p. 199 — 4046
Huc, recte observante v. Höhn. Fragm. Myk. VIII (1909) p. 32 spectat *Heteronectria spirillospora* Penz. et Sacc. — Syll. XIV pag. 624. — Specimina vetusta, subdenudata, sæpe collabescentia hinc molliuscula visa, fucum fecerunt.

HERPOTRICHIA Fuck. — Syll. II p. 211, IX p. 856, XI p. 338, XIV p. 592, XVI p. 541, XVII p. 714.

1. *Herpotrichia alpicola* Rehm, Ann. Mycol. IV (1906) p. 338. — 4047
Peritheciis in maculis nigris, c. 2-3 cm. long., 0,5 cm. lat., gregariis sub epidermide nidulantibus eamque elevantibus, denique perrumpentibus et plerumque in cortice denigrato sessilibus, globosis, minute papillulatis, atris, basi hyphis permultis, sæpe perlongis, simplicibus, septatis, subfuscis, 4 μ . lat. conjunctis, 0,3 mm. diam.; ascis cylindræo-clavatis, apice rotundatis, octosporis, 90-120 \times 10-20; sporidiis fusiformibus, utrinque subobtusis, transverse 1-3(-5) septatis, hyalinis, senescentibus interdum fuscidulis, 25-30 \times 5-8, strato tenui mucoso obductis, distichis; paraphysibus ramosis.

Hab. ad caules putrescentes *Aconiti* in alpibus editioribus Hungariæ et Transilvaniæ (LINHART, LOIKA). — A *Metasphaeria rupicola*, æque aconiticola, probe distincta.

2. *Herpotrichia Boldoæ* Speg., Fungi Chilenses (1910) p. 65. — Pe- 4048
ritheciis ligno denudato insidentibus, subgregariis, subiculo olivaceo laxè gossypino absconditis, globosis vel cupulato-collapsis, mi-

nutis, ostiolo concolore vix papillato donatis, atris, coriacellis, 200-250 μ . diam.; ascis subcylindraceis, postice cuneatis brevissimeque pedicellatis, dense paraphysatis, 100 \times 14-16; sporidiis fusoides, rectis v. vix inæquilateralibus, submajusculis, hyalinis, medio 1-septato-constrictulis, primo 6-blastis (an muco tenuiter vestitis?) dein 3-5-septatis, 37-40 \times 7-8.

Hab. in ramis emortuis putrescentibus Boldoæ fragrantis prope Talcahuano Chile, Amer. austr.

3. *Herpotrichia chilensis* Speg. Fungi Chilenses (1910) pag. 66; cum 4049 icon. — Peritheciis ligno denudato sparsis vel laxe gregariis, udis subglobosis siccis cupulato-collapsis, 200-250 μ . diam., nigris, vix papillulato-ostiolatis, membranaceo-coriaceis, basi hyphis radiantibus nonnullis olivaceis cinctis, 50-250 \times 5-6; ascis ellipsoideo-subclavulatis, breviter pedicellatis, dense paraphysatis, 80-100 \times 20, 4-6-8-sporis; sporidiis octonis subtristichis, fusoides inæquilateralibus hyalinis, 8-blastis, serius 3-5-septatis, 38-45 \times 7-9.

Hab. in ramis vetustis Proustiae pungentis prope Batuco, Chile Amer. austr.

4. *Herpotrichia Myriangii* Raciborski, Bull. Ac. Sc. Cracovie (1909) 4050 p. 384. — Peritheciis nigris, globosis, coriaceis, 190-240 μ . diam., apice depresso ostiolato-papillatis, papilla pallida 30-40 μ . alta, 40-60 μ . lata, superficie pilis crebris, curvulis, brunneis 30-90 \times 4-6 tectis; loculo peritheci globoso, 120-160 μ . diam., ascis e basi et e lateribus ad ostiolum convergentibus farcto; ascis clavatis, octosporis 55-64 \times 17-20; sporidiis rectis v. curvulis, brunneis, elongato-ovoideis, apice rotundatis, levibus, 14 \times 5, non constrictis, distichis; paraphysibus filiformibus.

Hab. in stromatibus Myriangii ad folia Caricæ Papayæ prope Buitenzorg Java.

5. *Herpotrichia tenuispora* Kirschst., Verh. Botan. Ver. Brandenb. 4051 XLVIII (1906) pag. 50. — Peritheciis gregariis, sessilibus, membranaceis, pilis longis, brunneis, incurvatis, septatis, 4 μ . cr. ob-
sitis, circ. 0,5 mm. diam., impresso-subglobosis, nigris; ascis anguste cylindraceo-clavatis, supra rotundatis, breviter pedicellatis, octosporis, 100-110 \times 6-7; sporidiis bi-v. polystichis, hyalinis, elongato-fusoides, guttulatis, indistincte 6-locularibus, ad septa plus minus constrictis, loculo secundo v. tertio conspicue protuberanti, in ascis ipsis sæpe germinantibus, 26-35 \times 3; paraphysibus numerosis, hyalinis, filiformibus, ramosis.

Hab. in caulibus putrescentibus *Urticæ* dioicæ, Hasellake prope Gross-Behnitz Germaniæ.

6. *Herpotrichia rhodospiloides* Peck, Bull. Torr. Bot. Club XXXVI 4052 (1909) pag. 154. — Peritheciis gregariis, globosis, tomento effuso atro insidentibus, ad apicem subglabris, rufo-brunneis vel griseis, aliquando omnino atris, ostioliis obscure laceratis; ascis clavatis v. subcylindraceis, 60-100 μ . longis, 10-12 μ . latis; sporidiis confertis v. subdistichis, oblongis, subfusoides, rectis v. subcurvatis, uniseptatis, hyalinis, maturis flavescentibus, 16-20 \approx 6-8; quaque cellula 1-2-septata.

Hab. in ligno decorticato *Populi* deltoidis, Batesville Arkansas Amer. bor. (EL. BARTHOLOMEW). — *Herp. rhodospilæ* (B. et C.) Sacc. proxima sed colore peritheciolorum et sporidiis uniseptatis diversa.

7. *Herpotrichia appendiculata* Kirschst, ap. Jaap in Verh. bot. Ver. 4053 Prov. Brandenb. LII (1910) p. 138. — (Nomen nudum).

Hab. in ramulis putrescentibus *Frangulæ* *Alni* prope Triglitz in Germania.

Sect. 7. Phæosphragmiæ.

- **PHÆOSPHERIA** I. Miyake, Pilze Reispfl. Japan (Journ. Coll. Agric. Tokyo, II, p. 246) (Etym. *phaïos* ater et *Sphæria*, ob sporidia et perithecia atra). — Perithecia subcutaneo-erumpentia, typice foliicolæ, sphærellacea. Asci octospori aparaphysati. Sporidia 2-pluriseptata, oblonga, brunnea. — Genus cum plerisque speciebus mei gen. *Leptosphaerellæ* (Syll. II, p. 47, XIV, p. 19, n. 7) congruit; tamen cum nonnullæ hujus generis paraphysatæ videantur, genus Miyakeanum pro speciebus *aparaphysatis* adhiberi potest, dum *Leptosphaerella* Sacc. e. p. pro illis *paraphysatis* servanda est, quæ tunc a typo *Leptosphaeriæ* peritheciis membranaceis, minutis, follicolis et sæpe maculicolis dignoscitur.

1. **Phæosphæria Oryzæ** I. Miyake, Pilze Reispfl. Japan. (Journ. Coll. 4054 Agricult. Tokyo, II (1910) p. 246, t. XIII, f. 15-17. — Peritheciis subcutaneis, poro vix papillato erumpentibus, subglobosis, brunneo-nigris, 70-125 μ . lat., 90-125 μ . alt.; ascis cylindraceis, deorsum tenuatis, 35-55 \approx 7-9, apice rotundatis, 8-sporis; sporidiis distichis, fusoides, sæpe curvulis, 4-cellularibus, ad septa leniter contractis, sæpe minute pluriguttulatis, 16-23 \approx 4-5, flavo-atris.

Hab. in foliis glumisque *Oryzæ sativæ*, cui valde noxia, in tota Japonia. — Morbus japonice audit *Shiro-hagare-byo* (morbus albus).

2. **Phæosphæria Bambusæ** Miyake et Hara in Bot. Mag. Tokyo (1910) 4055 p. (340) [japonice].

Hab. in *Bambusæ* sp. in Japonia.

LEPTOSPHERIA Ces. et De Not. — Syll. II p. 13, IX p. 762, XI p. 321, XIV p. 562, XVI p. 510, XVII p. 719. — *Leptosphaerella* (Sacc.) Speg. in posterum certe separanda, sed totius generis *Leptosphaeriæ* epicrisis præmittenda.

1. **Leptosphæria Anemones** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4056 p. p. 334, t. VIII, fig. 6. — Peritheciis sparsis, epidermide tectis, dein erumpenti-superficialibus, depresso-globosis, glabris, nitidis, nigris, ostiolo brevi cylindrico, 210-250 μ . diam.; ascis cylindræo-clavatis, breve stipitatis, octosporis, 74-90 \times 8-10, filiformi-paraphysatis; sporidiis distichis v. interdum oblique monostichis, elongato-fusoideis, rectis v. leviter curvulis, 6-septatis, flavidulis, 30-34 \times 3,5-4, loculo tertio superiore plerumque paulo crassiore.

Hab. in petiolis siccis *Anemones silvestris* prope Kecskemét Hungariæ. — A *Leptos. raphidophora* Hazsl. differt sporidiis majoribus 6-septatis nec 9-septatis.

2. **Leptosphæria thalictricola** Hollós, Ann. Mus. Nat. Hungar. VII 4057 (1909) p. 51. — Peritheciis sparsis, epidermide velatis, depresso-globosis, breve papillatis, atris, glabris, 250-280 μ . diam., contextu celluloso; ascis clavatis, breve stipitatis, octosporis, 90-100 \times 8-11, filiformi paraphysatis; sporidiis 2-3-stichis, fusiformibus, curvulis, 7-septatis, 8-guttulatis, loculo tertio superiore inflato, 26-34 \times 3,5-4.

Hab. in caulibus siccis *Thalictri collini* prope Kecskemét Hungariæ.

3. **Leptosphæria Thoræ** Jaap, Ann. Mycol. VI (1908) p. 210. — Peritheciis in maculis pallidis insidentibus, sparsis, nigro-brunneis, globosis, 200-250 μ . cr., late ostiolatis; ascis clavatis, supra rotundatis, stipite brevi, usque ad 10 μ . longo præditis, rectis v. curvis, 70 \times 14-16, dein usque ad 100 μ . elongatis, octosporis; sporidiis distichis, elongato-fusoideis v. subclavatis, rotundatis, 4-locularibus, ad septa constrictulis, loculo secundo supero parum latiore, 18-24 \times 7-7,5, viridi-flavis; paraphysibus parcis, filiformibus, supra inflatis, hyalinis.

Hab. in foliis *Ranunculi Thoraë*, prope Eisenkappel in Karawanken Austriae. — Socia adest *Phyllostictæ* species.

4. *Leptosphaeria andrijevicensis* Bubák, Bull. Herb. Boiss. 2 sér. VI 4059 (1906) p. 400. — Peritheciis sparsis v. hinc inde aggregatis, depressis, 250-400 μ . diam., nigris, primum epidermide tectis, dein collo conoideo erumpentibus, contextu obscure brunneo parenchymatico; ascis elongato-clavatis, rectis v. curvulis, 80-100 \times 9-11, basi sensim angustatis, breviter pedicellatis, octosporis, paraphysibus filiformibus numerosis, hyalinis obsitis; sporidiis fuscoideis, supra distichis infra oblique monostichis, 22-26 \times 4-4.5, rectis v. curvulis, utrinque rotundatis, 7-septatis, loculo tertio superiore majori, brunneo-olivaceis.

Hab. in caulibus senioribus *Ranunculi Villarsii* pr. *Andrijevic*on sub Hasanac planina 1000-1400 m. alt., Montenegro.

5. *Leptosphaeria inconspicua* Rehm, Oesterr. bot. Ztschr. LVI (1906) 4060 p. 296 (Nomen nudum).

Hab. in ramulis *Berberidis* prope Bärenbad Stubai Austria.

6. *Leptosphaeria Pelargonii* Rehm, Hedwigia XLVII (1905) pag. 5, 4061 fig. 2 (ex errore *Pelagerinii*). — Peritheciis in maculis dealbatis exsiccatisque irregularibus, tenuissime fuscicule cinctis, sparsis, innatis, globulosis, nigris, ostiolo haud conspicuo, c. 100 μ . diam., membranaceis; ascis clavatis, apice rotundatis, 60-65 \times 8-9, octosporis; sporidiis cylindraceis, utrinque rotundatis, transverse 3-rarissime 4-septatis, haud constrictis, cellulis oleoso-guttatis, subfuscis, 12-14 \times 3, in superiore asci parte distichis; paraphysibus ramosis, 2 μ . cr.

Hab. ad folia *Pelargonii* culti, Rio de Janeiro Amer. austr. (ULE). — *Lept. Tini* Ell. et Ev. et *L. Physalidis* Ell. et Ev. affinis, sed sporidiis rectis, obscurioribus, cylindricis diversa.

7. *Leptosphaeria Lankeana* P. Henn., Verh. Bot. Ver. Prov. Brandb. 4062 XLVII (1905) p. 220. — Peritheciis sparsis v. gregariis, epidermide tectis dein erumpentibus, ostiolatis, ovoideis, atris, 180-200 μ . cr.; ascis clavatis 8-sporis, 90-120 \times 10-12, paraphysibus filiformibus septatis valde constrictis, hyalinis, 3-6 μ . cr.; sporidiis subdistichis interdum subtristichis, fuscoideis, utrinque acutiusculis, 7-9-septatis, ad basim constrictis, primo hyalinis dein olivaceis, 25-40 \times 4-5.5.

Hab. in caulibus siccis *Hyperici perforati*, Hellmühle Germaniæ. — Socia adest *Diploceras hypericinum* (Ces.). A *Lept. Hyperici* Wint. etc. omnino diversa.

8. *Leptosphæria inquinans* Peck, New Y. St. Mus. Bull. 131 (1909) 4063
p. 22. — Peritheciis dense gregariis, subcarbonaceis, epidermide ostiolis nigris perforata tectis, globosis, $\frac{3}{4}$ mm. lat., nigris; ascis cylindraceo-clavulatis; sporidiis distichis v. confertis, cylindraceis, obtusis, plerumque curvis, 3-septatis, coloratis, loculis extimis subhyalinis, 16-24 \approx 4-6.

Hab. in cortice *Aceris saccharini*, Vaughns Washington Co. Amer. bor. (S. H. BURNHAM).

9. *Leptosphæria Auerswaldii* Sacc. et Trav. — Syll. XIX, p. 1096 — 4064
Sphærella leptosphærioides Auersw. in Gonn. et Rabenh. Mycol. Europ. Heft. 5-6, p. 13, t. 7, f. 104. — Peritheciis amphigenis, atris, epidermide innatis, sparsis, exacte globosis, ostiolo cylindraceo brevissimo sed crasso, 20 μ . longo præditis, 120-140 μ . diam.; ascis oblongo-fusoideis, vix stipitatis, apice rotundatis, 55-66 \approx 14, octosporis; sporidiis dense 3-4-stichis, oblongo-fusoideis, 3-septatis, ad septum medium constrictis, melleis, 30 \approx 6, loculis singulis 1-2-guttulatis.

Hab. in utraque pagina et sepalis *Arenariæ ciliatæ* in Alpbis. — Paraphyses deesse dicitur, sed species ad gregem *Leptosphærellæ* certe pertinet.

10. *Leptosphæria Gypsophilæ* Hollós, Ann. Mus. Nat. Hung. V (1907) 4065
p. 45. — Peritheciis primum epidermide tectis, demum superficialibus, dense gregariis, depresso-globosis, breve papillatis, nigris, subcuticularibus, 300-400 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis, 70-80 \approx 8-10, filiformi-paraphysatis; sporidiis distichis, fusoideis, rectis subfalcatisve, utrinque leniter attenuatis, 3-septatis, ad septum medium constrictis, pluriguttulatis, flavidulis, 40-50 \approx 3-4.

Hab. in caulibus siccis *Gypsophilæ paniculatæ*, prope Kecskemét Hungariæ.

11. *Leptosphæria ? Proliferæ* Feltg., Vorst. Pilz-Fl. Luxemb. IV (1905) 4066
p. 50. — Peritheciis gregariis in maculis pallidis indefinitis insidentibus, epidermide immutata omnino tectis, brunneis, globosis v. subdepressis, 0,1-0,15 mm. raro 0,3 mm. diam.; ascis clavatis, supra angustatis, breviter crasseque pedicellatis; paraphysibus filiformibus septatis obsitis, octosporis, 85-95 \approx 16-18; sporidiis inordinate distichis, ellipsoideo-fusoideis, utrinque obtusis, rectis vel curvulis, triseptatis, ad septa constrictulis, flavidis, guttulis numerosis parvis raro nonnullis majoribus immixtis præditis, 22-28 \approx 8-8,5.

Hab. in caulibus siccis Tunicæ proliferæ, Pulverm. Höhe et Garten Conrot Luxemburgia. — *L. Euphorbiæ* affinis.

12. *Leptosphæria eustoma* (Fr.) Sacc. — Syll. II, p. 61 — var. *le-* 4067
guminosa Fairman, Ann. Mycol. IV (1906) p. 327, fig. 2. — Peritheciis sparsis, minutis, erumpenti-superficialibus, subglobosis minutissime papillatis, atris; ascis cylindraceo-clavatis, breve stipitatis, apice rotundatis, paraphysibus filiformibus, octosporis, 60-75 \times 13-15; sporidiis distichis, oblongo-fusiformibus, rectis v. curvulis, 3-septatis, ad septa constrictis, uno loculo intermedio paullo crassiore, pallide flavis, 23-27 \times 6-7.

Hab. in interiore leguminum Robiniæ Pseudacaciæ, Lyndonville N. Y. Amer. bor.

13. *Leptosphæria Lyndonvillæ* Fairman, Ann. Mycol. IV (1906) p. 326, 4068
 fig. 1. — Peritheciis sparsis, erumpenti-superficialibus, depressoglobosis v. globoso-lenticularibus, minutissimis, atris; ascis cylindraceo-clavatis, breve stipitatis, apice late rotundatis, rectis vel curvulis, paraphysibus filiformibus, octosporis, 74-100 \times 10-12; sporidiis distichis (v. rarissime uniseriatis), clavatis, rectis, 6-9-septatis, loculo tertio superiore globoso-incrassato, apice rotundatis, deorsum in cellulas attenuatas desinentibus, sub-constrictis, primo guttulatis, 20-23 \times 6-7, luteo-fuscis.

Hab. in leguminibus Robiniæ Pseudacaciæ, in silvaticis Lyndonville N. Y. Amer. bor. — Ab affinibus *Lept. carpogena* et *Lept. rhopalispora* diversa.

14. *Leptosphæria Verbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4069
 (1908) p. 126. — Peritheciis corticolis epidermide velatis, e globoso lenticularibus, subcarbonaceis, sparsis v. hinc inde plus minusve confertis, 90-150 μ . diam., ostiolo vix papillato perforatis; ascis clavulatis sursum subtruncato-rotundatis crasseque tunicatis, basi breviter cuneato-pedicellatis 50-60 \times 8-10, densissime paraphysatis, octosporis; sporidiis oblique distichis, elongato-ellipsoideis, 3-septatis, loculo secundo supero crassiore, chlorino-flavidis, 10-14 \times 3-4.

Hab. ad ramos languidos v. emortuos Ilicis paraguayensis in dumetis circa San Pedro Argentina Amer. austr

15. *Leptosphæria Trevoæ* Speg., Fungi Chilenses (1910) p. 79, cum 4070
 icon. — Peritheciis primo epidermide tectis dein nudis, gregariis v. subseriatis minutis lenticularibus atris, tenui-membranaceis, vix papillulato-ostiolatis, 250-300 μ . diam.; ascis linearibus breviter pedicellatis parce pseudo-paraphysatis, 4-6-8-sporis, 200 \times 12; spo-

ridiis subellipsoideis sæpius 3-septatis atque leniter curvulis, utrinque obtusis intense fuligineis, in asco tunica mucosa vestitis dein nudis, 20-30 \approx 10.

Hab. in ramis emortuis Trevoæ trinervis in collibus San Bernardo prope Santiago Chile Amer. austr.

16. *Leptosphæria Sanguisorbæ* Karst. apud Berl. Icon. fung. I, p. 78, 4071 t. 66, f. 4. — Peritheciis sparsis, $\frac{1}{3}$ mm. diam., globosis, tectis, ostiolo breviter papillato erumpentibus; ascis fusoideo-clavatis, brevissime noduloso-stipitatis, octosporis, paraphysatis; sporidiis subtristichis, fusoideis, curvulis, utrinque obtusulis et brevissime appendiculatis, 5-septatis, 32-35 \approx 4-5, sordide flavis, loculo tertio subinde lenissime crassiore.

Hab. in caulibus *Sanguisorbæ officinalis* in Lapponia Rossica (KARSTEN).

17. *Leptosphæria Cercocarpi* Syd., Ann. Mycol. V (1907) p. 339. — 4072 Peritheciis epiphyllis, sparsis v. aggregatis, primo epidermide tectis, dein erumpentibus, applanato-globosis, ca. 175-225 μ . diam., atris, carbonaceis, obtuse papillatis; ascis oblongo-cylindraceis, sæpe curvulis, apice rotundatis, basi brevissime stipitatis, 70-90 \approx 20-25, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 3-septatis, non v. leniter constrictis, flavo-olivaceis, cellula secunda vix crassiore, 26-28 \approx 10-12.

Hab. in foliis emortuis *Cercocarpi ledifolii*, Mill. Creek Camyon, Salt Lake Co. Utah Amer. bor. (A. O. GARRETT).

18. *Leptosphæria Puttemansii* Maubl., Bull. Soc. Myc. Fr. (1905) p. 88, 4073 pl. VI, f. 3. — Maculis amphigenis, rotundatis, sæpe confluentibus, ochraceo-ferrugineis, linea angusta atro-fusca cinctis, usque ad 1 mm. latis; peritheciis nigris, plerumque epiphyllis, epidermide tectis, globulosis, 100 μ . diam.; ascis cylindricis, apice rotundatis, paraphysatis, 50-60 \approx 10; sporidiis fusoideis, utrinque obtusiusculis, 3-septatis, non constrictis, eguttulatis, fuligineis, 18 \approx 5.

Hab. in foliis *Eriobotryæ japonicæ* in horto botanico Sao Paulo Brasiliæ. — Pycnidia peritheciis similia: sporulis ellipticis, hyalinis, 4-6 \approx 2-2.5.

19. *Leptosphæria Lingue* (Speg.) Sacc. et Trott., *Leptosphaerella* ? Lin- 4074 gue Speg., Fungi Chilenses (1910) p. 77, cum icon. — Maculis nullis; peritheciis sparsis lenticularibus minutis, 100-120 μ . diam., parenchymate innatis, epidermide velatis, sæpius epiphyllis, atris, coriacellis; ascis cylindraceis brevissime pedicellatis, 100-110 \approx 10-

15; sporidiis ellipsoideis v. ellipsoideo-navicularibus, olivaceo-fulgineis 2-septatis, cellula centrali obscuriore, $15-20 \times 6-7$.

Hab. in foliis dejectis putrescentibus *Perseæ Lingue* in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

20. *Leptosphæria Lauri* Maubl., Bull. Soc. Myc. Fr. (1905) p. 89, pl. VI, 4076 fig. 7. — Peritheciis hypophyllis, sparsis, globosis, nigris in maculis amphigenis superne albidis, inferne ochraceis, sinuosis, fusco-cinctis insidentibus; ascis cylindricis v. subclavatis, breviter pedicellatis, paraphysatis, 110×15 , octosporis; sporidiis distichis fusoides, rectis curvulisve, utrinque obtuse attenuatis, 3-septatis, ad septa leniter constrictis, enucleatis, luteolis, $25-30 \times 6-8$.

Hab. in foliis *Lauri nobilis*, Seine-et-Marne Gallia. — *Socia* adest *Phyllostictæ* sp. sporulis ovoideis, 6×3 , facile pycnidium *Leptosphæriæ*.

21. *Leptosphæria coniigena* Sacc. et Trott., *Leptosphæria Conii* Speg., 4076 An. Mus. Nac. Buenos Aires t. XIX (1909) p. 382, non Rostr. — Maculis nullis; peritheciis hinc inde gregariis primo tectis dein nudis sublenticularibus, $200-250 \mu$. diam., minute papillulato-ostiolatis; ascis subcylindraceis brevissime pedicellatis $70-75 \times 10-12$, octosporis, pseudoparaphysibus dense obvallatis; sporidiis distichis ellipsoideo-subfusiformibus, 3-septatis, $16-20 \times 5-6$, flavidis.

Hab. ad caules dejectos putrescentes *Conii maculati* in Silva Santa Catalina, Buenos Aires, Argentina Amer. austr. — *Lept. Dolioli* (Pers.) De N. nec non *L. conoideæ* De N. valde affinis, ascis sporidiisque conspicue crassioribus distincta.

22. *Leptosphæria Conii* Rostr. Mykol. Meddel. IX (1905) pag. 311 4077 (Bot. Tidsskr.). — Peritheciis serialiter dispositis, nigris, nitidis; ascis clavatis $80-85 \times 10-13$; sporidiis elongato-fusoides, viridi-flavescentibus, 9-septatis, loculo quarto superiore, tumidiore, $40-50 \times 5$.

Hab. in caulibus *Conii maculato*, Sjøland Køge Dania.

23. *Leptosphæria utahensis* Ell. et Ev. North Amer. Pyrenom. (1892) 4078 pag. 361. — Peritheciis sparsis v. subgregariis, subcuticularibus, basi fibrillosis, $150-175 \mu$. diam., e collapsu concavis, ostiolo minuto papilliformi præditis; ascis oblongo-cylindraceis, sessilibus, paraphysatis, $55-60 \times 7-8$; sporidiis distichis, oblongo-fusoides, subinæquilateralibus, 3-septatis, utrinque obtusis, primum flavidis demum opacis, 15×3 , diu uniseptatis.

Hab. in ramulis emortuis *Umbelliferæ*? cujusdam, Pleasant Valley Utah Amer. bor. (S. J. HARKNESS).

24. *Leptosphæria Ellisia* Berl., Icon. fung. I, p. 68, t. 55, f. 2, *L.* 4079

subconica Ell. et Ev. N. Amer. Pyren. n. 697, non C. et P. — Peritheciis sparsis $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam. conoideis, tectis, prominulis, longiuscule et crassiuscule papillatis; ascis tereti-clavatis, brevissime noduloso-stipitatis, 110-120 \times 10-12, paraphysatis, octosporis; sporidiis distichis confertis, fusoideis, leniter curvis, utrinque acutatis, 3-septatis, septo medio leniter constrictis, 32-35 \times 5-6, dilute olivaceis.

Hab. in caulibus emortuis *Ænotheræ* biennis, Newfield Amer. bor. — A *Lept. argentina* magnitudine sporidiorum imprimis distinguenda.

25. *Leptosphæria Francoæ* (Spegazz.) Sacc. et Trott., *Leptosphærella* 4080 *Francoæ* Speg., Fungi Chilenses (1910) p. 77. — Maculis nullis; peritheciis laxè gregariis, globoso-depressis, pusillis, primo epidermide velatis, vix papillulato-ostiolatis, atris, glabris, membranaceis, 80-100 μ . diam.; ascis cylindræis aparaphysatis, brevissime crasseque pedicellatis, 40-42 \times 8; sporidiis ellipsoideo-subfusoideis parvis, 3-septatis, non v. vix ad medium constrictulis, pallide olivaceis 12-15 \times 4.

Hab. in scapis siccis *Francoæ* sonchifoliæ, Bahía de Corral Chile Amer. austr.

26. *Leptosphæria Torrendii* Trav. et Spessa, Bol. Soc. Brot. XXV 4081 (1910) pag. 171, t. I, f. 3. — Peritheciis hinc inde subgregariis, epidermide initio tectis dein erumpentibus, globoso-papillatis, 140-200 μ . diam.; nigris, contextu distincte sed minute pseudoparenchymatico, fuligineo; ascis cylindræo-fusoideis, apice rotundatis, brevè pedicellatis, 70-85 \times 8-11, paraphysibus filiformibus obvallatis; sporidiis subdistichis, oblongo-fusoideis, plerumque curvulis v. inæquilateris, utrinque attenuatis, 3-septatis, ad septa vix constrictis, 16-29 \times 5 $\frac{1}{2}$ -7, dilute olivaceis.

Hab. in ramis siccis *Ricini* communis, pr. S. Bento Coimbra, IV 1903 (A. MOLLER).

27. *Leptosphæria Lythri* Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4082 p. 220. — Peritheciis minutis sparsis, depressis, epidermide rupta subtectis, nigris, ostiolo minute papilliformi præditis; ascis oblongis v. clavatis, 100-150 \times 20-30, subsessilibus; sporidiis oblongis v. subfusoideis rectis v. curvulis, primum hyalinis dein flavido-brunneis, 5-7-septatis, cellula tertia cressiore, 30-40 \times 12-16.

Hab. in caulibus emortuis *Lythri* alati, Stockton Kans. Amer. bor. (E. BARTHOLOMEW).

28. *Leptosphæria chilensis* Speg., Fungi Chilenses (1910) p. 78. — 4083

Peritheciis subepidermicis, sparsis v. laxe gregariis, subglobulosis minutis carbonaceis atris 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis, paraphysatis, octosporis, 150 \approx 10-12; sporidiis oblique monostichis fusoideis non v. leniter inæquilateralibus, olivaceis, mediocribus, 5-septatis, ad septum medium tantum constrictis, 25-30 \approx 7-8.

Hab. in ramis emortuis Lomatiae obliquae in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

29. *Leptosphæria fuscella* (B. et Br.) Ces. et De Not. — Syll. II, 4084 p. 30 — Var. *Sydowiana* Sacc. in Sydow, Mycoth. germ. n. 485 et Ann. Mycol. IV (1906) pag. 484. — Sporidiis utrinque minus obtusis, olivaceis, 20 \approx 7; ascis 110-130 \approx 8-9.

Hab. in ramis *Hippophaës rhamnoidis*, Rüdersdorfer Kalkberge pr. Berolinum.

30. *Leptosphæria Hippophaës* (Sollm.) Sacc., *Sphæria Hippophaës* Sollm. 4085 Bot. Zeit. (1862) p. 379, tab. XII, f. 23. — Astromatica; peritheciis gregariis, subgloboso-depressis nigris, levibus, cortici interiori immersis, epidermide tectis, eamque hemisphaerice protrudentibus, ostiolis papillaeformibus, conicis (longiusculis) erumpentibus dein supra secedentibus et basim cupulaeformem relinquentibus; nucleo tenaci fulvo; paraphysibus deliquescentibus; ascis cylindricis 100 μ . longis, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, ad septa non constrictis, fulvis, 22-23 \approx 10.

Hab. in turionibus corticatis emortuis *Hippophaës rhamnoidis*, Coburg Germaniae. — Cl. Winter (Deutschl. Kr. Fl. II, p. 243, 882) ad *Melanomma Hippophaës* Fabr. refert, sed ob perithecia omnino tecta et ostiola longiuscula diversa species videtur. Species a Wintero relata vero est certe Sollmanniana.

31. *Leptosphæria Azaleæ* Hollós, Ann. Mus. Nat. Hung. VI (1908) 4086 p. 529. — Peritheciis sparsis, epidermide velatis, depresso-globosis, atro-brunneis, ostiolo pertusis, 140-180 μ . diam., contextu celluloso; ascis clavatis, sessilibus, octosporis, 50-70 \approx 10-12, filiformi-paraphysatis; sporidiis biseriatis, fusoideis, rectis v. curvulis, 3-septatis, constrictis, loculo secundo superiore plerumque crassiore, luteolis, 18-20 \approx 5-7.

Hab. in ramis emortuis *Azaleæ* spec. in hortis, Kecskemét Hungariae.

32. *Leptosphæria Physostegiae* Fairm., Proc. Rochest. Ac. of Sc. IV 4087 (1906) p. 216. — Peritheciis parvis, nigris, conicis, erumpentibus, sparsis v. gregariis; ascis oblongo-cylindraceis, 80-85 \approx 10; spori-

diis monostichis, 3-5-septatis, ad septa non v. leniter constrictis, pallide brunneis, oblongo-fusoideis, guttulatis, oculis mediis crassioribus, 20-26 \times 6-7.

Hab. in caulibus emortuis *Physostegiae virginianæ*, Lyndonville N. Y. Amer. bor.

33. *Leptosphæria substerilis* Peck, New York State Mus. Bull. 105 4088 (1906) p. 24. — Follicola; maculis minutis, 1-2 mm. lat., numerosis, suborbicularibus, sæpè confluentibus, plerumque sterilibus, brunneis v. nigricanti-brunneis, linea elevata cinctis; peritheciis paucis, 1-6 in quaque macula, epidermide velatis, nigris, inæqualibus; ascis subcylindraceis v. clavatis, basim versus tenuatis; sporidiis intra ascum confertis, triseptatis, subfusiformibus, coloratis, 25-30 \times 7.

Hab. in foliis vivis *Menthæ piperitæ*, Lakeport, Madison Co. Amer. bor.

34. *Leptosphæria Zahlbruckneri* Strasser, Verh. zool. bot. Gesellsch. 4089 Wien LVII (1907) p. 315. — Peritheciis nitidis nigris, membranaceis, minutis, primum ostiolo papillulato prominentibus dein liberis globosis; subiculo nullo; ascis cylindraceo-fusoideis, supra obtuse acutatis, 40-50 \times 6-8; sporidiis e hyalino flavidis, acute fusoideis non appendiculatis, sæpè curvis, triseptatis, loculo secundo sup. majore, grosse guttulatis, medio fortiter constrictis, 12-16(-20) \times 3-4; paraphysibus filiformibus.

Hab. in caulibus siccis *Menthæ silvestris*, Sonntagberg Austriæ inf. (STRASSER). — *L. setosæ* Niessl. affinis sed sporidiis, ascis, subiculo distincta.

35. *Leptosphæria Periclymeni* Oud. — Syll. IX, p. 780. — var. *ta- 4090*
tarica Potebnia, Myc. St. in Ann. Myc. V (1907) p. 14, fig. 25 et Trav. Soc. Nat. Univers. Kharkow, XXXXVIII (1907) p. 62. — Peritheciis 200-220 μ . cr., pallide brunneis ostiolo brevi præditi; ascis 100 \times 17 longioribus quam paraphysibus; sporidiis pallide flavo-brunneis 26-28 \times 8-9, 3-septatis, constrictis.

Hab. in ramis vivis *Loniceræ tataricæ*, socia *Rhabdospora Xylostei*, Charkow Rossia.

36. *Leptosphæria Tupæ* Speg., Fungi Chilenses (1910) pag. 79. — 4091
Peritheciis laxè gregariis, epidermide velatis, lenticularibus, minutis, atris, vix papillulato-ostiolatis, 100-150 μ . diam.; ascis lanceolato-subcylindraceis parce paraphysatis, brevissime pedicellatis 100-120-10-12; sporidiis subellipsoideis, sæpius subnavicularibus, disti-

chis, chlorinis, ad maturitatem 3-septatis, ad medium constrictulis, 16-22 \times 5-7.

Hab. in pedunculis siccis Lobeliæ Tupæ prope Ciudad de Valdivia, Chile Amer. austr.

37. *Leptosphæria valdiviensis* Speg. Fungi Chilenses (1910) pag. 80, 4092 cum icon. — Peritheciis laxè gregariis v. subcæspitosis, epidermide sublevata tectis, globulosis carbonaceis atris glabris, minute papillulato-ostiolatis, 150-180 μ . diam.; ascis subcylindræis breviter pedicellatis paraphysatis, 70-80 \times 10; sporidiis distichis subacicularibus non v. vix inæquilateralibus sæpius 7-septulatis, ad septum medium constrictulis, oculis grosse 1-guttulatis, mediano supero cæteris parum crassiori, chlorinis, mediocribus, 28-38 \times 4-5.

Hab. in pedunculis emortuis putrescentibus Digitalis purpureæ prope Ciudad de Valdivia Chile Amer. austr.

38. *Leptosphæria Galii-silvatici* Kirschst., Verh. Bot. Ver. Brandenb. 4098 XLVIII (1906) pag. 56. — Peritheciis confertis sub peridermio nidulantibus, papilla prominentibus, depresso globosis, nigris, membranaceis, circ. 200 μ . diam., hyphis sparsis brunneis circumdatis; ascis clavatis, sessilibus, octosporis, 70-80 \times 8-10; sporidiis irregulariter 2-v. 3-stichis, fusoides, rectis v. curvulis, flavidis, 8-11-ocularibus, supra conoideo-angustatis, ad septa non constrictis, 24-30 \times 4-5; paraphysibus filiformibus, 1-2 μ . cr.

Hab. in caulibus siccis Galii silvatici, Hasellake prope Gross-Behnitz Germaniæ.

39. *Leptosphæria Cynoglossi* Hollós, Ann. Mus. Nat. Hung. V (1907) 4094 pag. 455. — Peritheciis sparsis, superficialibus, depresso-globosis, glabris, nigris, 210-250 μ . diam., ostiolo brevi cylindrico; ascis cylindræo-clavatis, breve stipitatis, 6-8-sporis, 60-70 \times 8, filiformi-paraphysatis; sporidiis 2-3-stichis, elongato-fusoides, rectis v. leviter curvulis, 3-septatis, flavidulis, 30-32 \times 3,5-4, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis decorticatis Cynoglossi officinalis prope Kecs-kémét Hungariæ.

40. *Leptosphæria Solani* Romell apud Berlese Icon fung., I, p. 63, 4095 t. 49, fig. 6. — Peritheciis sparsis, globoso-conoideis, tectis, $\frac{1}{3}$ mm. diam.; ascis tereti-clavatis, brevissime noduloso-stipitatis, octosporis, paraphysatis, 75-85 \times 9-11; sporidiis distichis, oblongis, utrinque obtusulis, 3-septatis, ad septa, præcipue medium constrictis, olivaceis, 14-16 \times 6-7.

Hab. in caulibus Solani Dulcamaræ in Gotlandia Sueciæ

(ROMELL in herb. Sacc.). — A *Lept. sociali* peritheciis multo majoribus imprimis differt.

41. *Leptosphæria acheniorum* Starb., in Arkiv för Botan. (1905) 4096 pag. 23 (ut var. *L. agnitæ*) t. I, f. 19 (*L. acheniorum*), extr. — Peritheciis minoribus, rugosiusculis, distincte conico-papillatis, 200-250 μ . diam.; ascis 82-90 \times 9-10; sporidiis tereti-fusiformibus, 6-septatis, ad medium constrictis, 33-35 \times 5.

Hab. in acheniis aridis Mikaniæ sp. Tarija Boliviae.

42. *Leptosphæria perplexa* Sacc. et Fairm. in Saccardo, Microm. A. 4097 mer. novi, Journ. of Myc. v. XII (1906) pag. 49. — Peritheciis gregariis, epidermide initio velatis, mox liberis, globosis, basi applanatis, nigris, nitidulis, 250-300 μ . diam., ostiolo conico-acuto, tertiam peritheci partem subæquante præditis, vetustis submuticis; ascis cylindræis, breve stipitatis, filiformi-paraphysatis, 85-90 \times 10-11, octosporis; sporidiis breve fusoides, utrinque acutulis, curvulis, 3-septatis, non v. vix constrictis, 22-25 \times 5-6, flavido-olivaceis.

Hab. in caulibus emortuis Solidaginis sp., pr. Lyndonville, New York, Amer. bor. — A typicâ *Lept. doliolo* (in Angelica etc.) differt peritheciis fere dimidio minoribus et ostioliis typice longioribus et acutioribus. Exemplaria in Dipsaco apud Rehm Ascom. n. 194 potius hanc speciem quam *Lept. doliolum* spectant.

43. *Leptosphæria agnita* (Desm.) De Not. et Ces. — Syll. II, p. 40 4098 var. *acheniorum* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 23, fig. 19. — Peritheciis minoribus, rugosiusculis, distincte conico-papillatis, 200-250 μ . diam.; ascis 82-90 \times 9-10; sporidiis 33-35 \times 5.

Hab. in acheniis aridis Mikaniæ, Tarija Boliviae. — A typo et varietatibus, inter quas præcipue var. *ambigua* Berl., quam maxime affinis, peritheciis minoribus, rugosiusculis nec non matrice recedit.

44. *Leptosphæria derasa* (Berk. et Br.) Auersw. — Syll. II, p. 41 4099 — f. *robusta* Strass., Verh. k. k. zool. bot. Gesell. Wien, LVII (1907) pag. 315. — A typo differt ascis sporidiisque constanter majoribus: ascis 100-120 \times 16; sporidiis 60-68 \times 4-5.

Hab. in caulibus siccis Senecionis nemorensis, Sonntagberg Austriae inf. — Socia adest *Metasphæria Senecionis* Berl. — Observante cl. Strasser, species ad *Pocosphæriam* esset ducenda.

45. *Leptosphæria papillata* (Bon.) Sacc. et Trav. — Syll. XIX p. 1109, 4100 *Myriocarpium papillatum* Bonorden Abhandl. Myk. I (1870) p. 154.

Syll. fung. XXII (VI-1912)

t. I, f. 24, non *Amphisphæria papillata* (Schum.). — Peritheciis laxè gregariis, hemisphærico-conoideis, vix 1 mm. diam., nigris, subsuperficialibus, in verticem tenuato-papillatis; ascis clavatis, apice rotundatis deorsum tenuatis breviterque stipitatis, octosporis, paraphysibus filiformibus ramulosis obvallatis; sporidiis distichis, fusiformibus, rectiusculis, utrinque acutulis, 5-6-septatis, ad septa constrictis, 5-guttulatis, brunneo-olivaceis.

Hab. in ramulis emortuis in Germania. — Forte est species quædam jam edita.

46. *Leptosphæria Massariella* Sacc. et Speg. — Syll. II, pag. 30 — 4101
var. *brasiliensis* Rehm, Ann. Mycol. V (1907) p. 528. — Peritheciis gregariis, sub epidermide haud mutata nidulantibus, demum in ejusdem rimis perspicuis, globulosis, ostiolo minutissimo prominente, poro pertusis, glabris, atris, ca. 0,35-0,4 mm. diam., contextu parenchymatico membranaceo, fusco; ascis cylindræis, 2-4-sporis apice rotundatis, crasse tunicatis, $130 \approx 15$; sporidiis ellipsoideis, rectis, 1-, dein 3-septatis, medio valde constrictis, flavofuscis, $25 \approx 10$; paraphysibus filiformibus, hyalinis, 2 μ . crassis.

Hab. in ramulo? Sao Paulo, Brasilia (USTERI). — A typo imprimis sporidiis majoribus et subquaternis dignoscitur.

47. *Leptosphæria cylindrostoma* Starb., Ascom. Schwed. Chaco-Cor. 4102
dill. Exp. in Arkiv f. Bot. Bd. V (1905) p. 23, fig. 18 a-b. — Peritheciis sparsim gregariis, matrice infossis, sphæroideis vel sphæroideo-lenticularibus, ad basim filamentis mycelialibus, flexuosis, repentibus parcissime obsessis, ostiolo cylindrico, longiusculo erumpentibus, atratis, c. 100 μ . diam.; ascis octosporis, cylindræo-clavatis, sursum rotundatis, deorsum fere sessilibus, $76-83 \approx 11-11,5$; sporidiis plerumque quatuor vel quinque superioribus distichis v. conglobatis, inferioribus oblique imbricatim monostichis, clavulatim ellipsoideo-oblongatis, inæquilateralibus vel fere curvulis, triseptatis, ad septa interdum lenissime constrictulis, loculis plerumque guttulatis, fuligineo-nigricantibus, $16,5-19 \approx 5-6,5$; paraphysibus simplicibus, filiformibus, hyalinis.

Hab. in caulibus (?) prope Laguna de la Brea, prov. Jujuy Argentina. — Peritheciis cylindræis et longiuscule ostiolatis, forma sporidiorum distincta videtur. Matrix non indicata.

48. *Leptosphæria acutiuscula* Berl. Icon. fung. I (1894) p. 86 (in textu) 4103
t. 80, f. 1 (sub *L. acuta*), *L. acuta* Rehm, non M. et N. — Peritheciis subgregariis, globoso-conicis, subcutaneo-erumpentibus, demumque liberis, $\frac{1}{3}-\frac{1}{2}$ mm. alt., sursum longiuscule et obtusius-

scule acutatis; ascis cylindræis, prælongis, 156-165 \times 10-12, brevissime noduloso-stipitatis, paraphysatis, octosporis; sporidiis tetrati-fusoideis, 48-52 \times 4-5, rectis curvulisve, utrinque obtusulis, 10-12-septatis, loculis 4°, 5° et 6° paullo incrassatis, olivaceis.

Hab. in caulibus *Urticæ* in Germania (REHM).

49. *Leptosphæria Salsolæ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4104

p. 335. — Peritheciis dense gregariis, epidermide tectis, erumpentibus, depresso-globosis, atris, carbonaceis, corrugatis, 400-450 μ . diam., ostiolo minutissimo; ascis cylindræo-clavatis, brevi-stipitatis, 4-8-sporis, 80 \times 10-12, filiformi paraphysatis; sporidiis distichis, fusoides, rectis v. leviter curvulis, utrinque leniter attenuatis, obtusatis, 5-septatis, flavidulis, 40-52 \times 6, loculis omnibus guttulatis v. eguttulatis, loculo tertio superiore semper crassiore.

Hab. in caulibus siccis *Salsolæ* Kali prope Izsak Hungariæ. — A *Lept. Lecanora* H. Fab. differt sporidiis multo majoribus.

50. *Leptosphæria livida* Voglino, in Annal. R. Accad. Agricolt. To- 4105

rino, LIII 1910 (1911) p. 352. — Maculis sparsis, rhomboideis v. irregularibus, plerumque margine sinuosis, epiphyllis, albo-griseis, 1,2-4 mm. latis; peritheciis paucis, sparsis, minutis, punctiformibus, globosis, subimmersis, late pertusis; ascis clavato-oblongis, rectis, brevissime stipitatis, 60-70 \times 10; paraphysibus filiformibus; sporidiis distichis, fusoides, 5-septatis, ad septa leniter constrictis, olivaceis, 24-26 \times 4.

Hab. in foliis vivis *Populi canadensis*, Santena, Villastellone, Pancalieri Italiæ bor.

51. *Leptosphæria Ephedræ* Maubl. Bull. Soc. Mycol. Fr. (1905) p. 88, 4106

pl. VI, f. 4. — Peritheciis minimis, sparsis, nigris, subglobosis, immersis 150-200 μ . diam.; ascis cylindricis, rectis vel curvulis, sessilibus, 65-75 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis monostichis sæpius superius distichis, 3-septatis, medio constrictis, loculo superiore paullo latiore et apice leviter tenuato, inferiore obtuso, olivaceo-melleis, 14-16 \times 5-6.

Hab. in ramulis emortuis *Ephedræ* distachyæ in arenosis prope ostium Ligeris Galliæ, socia *Anthostomella Distachyæ*.

52. *Leptosphæria irrepta* Niessl in Linhart, Fungi Hung. exsicc. n. 64, 4107

c. ic. (1882). — Peritheciis epiphyllis nunc sparsis, nunc subgregariis, hemisphæricis, tectis, ostiolo conico apiceque erumpentibus coriaceo-duris, atris, glabris, nitidis; ascis clavatis in stipitem brevem attenuatis, 55-70 \times 9-10, octosporis; sporidiis distichis oblon-

go-lanceolatis utrinque obtusis breviterque appendiculatis, 4-guttatis, dein 1-septatis, postremo verisimiliter 3-septatis, ad septa, præcipue medium constrictis, e subhyalino fuscidulis; 14-16 \approx 4; paraphysibus copiosis, simplicibus v. apice furcatis, filiformibus, ascos superantibus.

Hab. in foliis Cycadis revolutæ cultæ sub dio, Fiume.

53. *Leptosphæria Arecæ* Giuditta Mariani, in Atti Soc. it. Sc. nat. 4108 L (1911) pag. 165, fig. 2. — Peritheciis sparsis, globulosis, atris, erumpentibus, 150-200 μ . diam., contextu distincte pseudoparenchymatico, violaceo-fusco; ascis clavatis, breviter stipitatis, 55-70 \approx 12-14, paraphysibus copiosis ascum sæpe superantibus obvalatis; sporidiis distichis, fusoideis, subcurvulis vel inæquilateris, 3-septatis, utrinque obtusis et appendicula crassiuscula, loculiformi, hyalina auctis, 25-28 \approx 6-7, sine appendicibus 16-19 μ . longis.

Hab. in foliis languidis vel emortuis *Arecæ* sapidæ in Horto Botanico Conimbricensi Lusitaniæ (A. MOLLER). — Inter *Leptosphærias* palmicolas species valde distincta ob sporidia utrinque appendiculata. Sociæ adsunt: *Diplodia depazoides* Dur. et Mont. f. *Arecæ*; *Hendersonia Sabaleos* Ces. var. *Arecæ*, qui fungilli verisimiliter status secundarii sunt.

54. *Leptosphæria Molleriana* d'Almeida et da Camara, Bol. Soc. Bro- 4109 ter. XXIV (1908-1909), Extr. p. 18. — Peritheciis sparsis, epidermide tectis, globoso-depressis v. subglobosis, atris, poro pertusis, 200-250 μ . diam.; ascis obclaviformibus, sessilibus v. lenissime stipitatis, paraphysatis, 80-90 \approx 12-13; sporidiis fusoideis, utrinque rotundatis, distichis, triseptatis, sæpe curvulis, melleis, 22-25 \approx 6-7.

Hab. in foliis *Cocoës* Romanzoffianæ, in Horto botanico Coimbra Lusitaniæ (A. MOLLER). — A *Lept. Cocoës* facile distinguenda.

55. *Leptosphæria Desmonci* Syd., Hedwigia XLIX (1909) p. 79. — 4110 Peritheciis globosis, 250-300 μ . diam., ostiolo minuto erumpente, atris, membranaceo-carbonaceis; ascis cylindraceo-clavatis, apice incrassatis, brevissime stipitatis, 70-160 \approx 20-32, octosporis, copiose paraphysatis; sporidiis distichis, fusoideis, utrinque attenuatis, primo 1-septatis, hyalinis, tandem 3-5-septatis, flavidulis, loculo uno medio crassiore, medio constrictis, 42-60 \approx 6-11.

Hab. in ramis *Desmonci*, Para Americæ austr. (C. F. BAKER).

56. *Leptosphæria parvula* Niessl — Sacc. Syll. p. 169. — var. *Iridis-* 4111 *germanicæ* C. Mass., Novit. Fl. mycol. Veron. n. 291 et Osserv. titol., in Madonna Verona v. II (1908) Extr. p. 10. — Ascis elon-

gato-clavatis 50-65 \times 10-14, paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis, obscure olivaceis, fusiformi-oblongis, utrinque rotundatis, 1-3-septatis ad septa vix subconstrictis, 14-18 \times 6-7.

Hab. in foliis languidis *Iridis germanicæ* prope Tregnago in agro Veronensi Italia bor.

57. *Leptosphæria Iridis* Hollós, Ann. Mus. Nat. Hungar. V (1907) 4112 pag. 45. — Peritheciis sparsis, parenchymate foliorum immersis, globulosis, nigris, ostiolo conico pertuso, 280-320 μ . diam., contextu parenchymatico; ascis clavatis, sessilibus, 200-280 \times 100-120, octosporis, paraphysatis; sporidiis inordinate distichis v. conglobatis, fusoideis, 4-septatis, ad septa constrictis, dilutissime luteolis. 76-86 \times 18-26.

Hab. in foliis siccis *Iridis arenariæ*, prope Kecskemét Hungariæ.

58. *Leptosphæria socialis* Berlese, Ic. fung. I (1894) p. 63, t. 49, f. 5. 4118 — Peritheciis sparsis v. subgregariis, tectis, globoso-conoideis, 120-130 μ . diam.; ascis paraphysatis, tereti-fusoideis, brevissime noduloso-stipitatis, 60-65 \times 12-16, octosporis; sporidiis distichis oblongis, utrinque obtusulis, 3-septatis, leniter constrictis, fulvo-olivaceis, 15-18 \times 5-6, rectis.

Hab. in caulibus *Asparagi officinalis* in Fennia, sociis *L. præclara*, *L. Asparagi* et *L. punctoidea*.

59. *Leptosphæria Alpinia* Maubl. Bull. Soc. Myc. Fr. (1905) p. 89, pl. VI, 4114 f. 5. — Peritheciis minimis, immersis, atris, globosis, 100 μ . diam.; sursum in collum crassum breve 25 μ . long., 30 μ . cr. desinentibus; ascis cylindrico-clavatis, rectis v. curvulis, breviter stipitatis, octosporis, 50 \times 8-10, paraphysatis; sporidiis distichis, fusoideis, sæpe curvulis, 3-septatis, ad septa non constrictis, flavido-brunneis, 18 \times 4-5.

Hab. in foliis maculatis *Alpinia nutantis* in horto bot. Sao Paulo Brasiliæ (PUTTEMANS).

60. *Leptosphæria musicola* (Speg.) Sacc. et Trott., *Leptosphaerella musicola* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 382. — Maculis effusis indeterminatis sordide fuscescentibus; peritheciis innato-erumpentibus sparsis, atris, e globoso subpiriformibus, 120-125 μ . diam.; ascis obclavulatis, paraphysatis octosporis, breviter pedicellatis 60 \times 12; sporidiis subfusoideis, 3-septatis, ad septa leniter, ad medium validius constrictis, olivaceis, 18-24 \times 6.

Hab. ad folia putrescentia *Musæ paradisiacæ* in arvis circa

Orán Rep. Argentina Amer. austr. — An a *Leptosphæria Musarum* Sacc. et Berl. satis distincta?

61. *Leptosphæria Cannæ* Mac Alp. Austral. Fung. Dec. I-II, p. 375 4116
(Proceed. Linn. Soc. New S. Wales, 1902). — Peritheciis sparsis, minutis, nigris, erumpentibus, depresso-globosis, membranaceo-coriaceis, poro apicali munitis; ascis elongato-clavatis, in basim attenuatis, octosporis, $90 \approx 20-21$; paraphysibus filiformibus copiosis ascos æquantibus; sporidiis distichis, fusoideis, utrinque obtusis, olivaceis, 3-4-septatis, pro more curvulis et ad septa constrictis, $16 \approx 6,5-8$.

Hab. in pagina superiore albo-maculata foliorum *Cannæ* indicæ, Armadale pr. Melbourne Australiæ.

62. *Leptosphæria maritima* Hollós, Ann. Mus. Nat. Hungar. V (1907) 4117
pag. 46. — Peritheciis epidermide velatis, sparsis gregariisve, depresso-globosis, fuscis, ostiolo papillato perforato, $180-230 \mu$. diam., contextu parenchymatico; ascis ellipsoideis v. clavatis, breve stipitatis, apice rotundatis et incrassatis, octosporis, $80-110 \approx 26-32$; sporidiis 2-3-stichis, fusoideis, rectis v. curvulis, 3-septatis, non v. vix constrictis, flavo-brunneis, $42-52 \approx 10-14$.

Hab. in caulibus et foliis siccis *Triglochinis maritimi*, prope Izsák Hungariæ. — A *Leptosphæria triglochinicola* Curr. et L. *Triglochinis* Sacc. diversa.

63. *Leptosphæria Rusci* (Wallr.) Sacc. — Syll. II, p. 74. — Var. *Hypophylli* Maire, in Bull. Soc. bot. France, LVI (1909) [ed. 1911]
p. CCLXXII, f. 3. — A typo differt sporidiis pro more 3-septatis, nec 4-septatis, majusculis: nempe $28-35 \approx 6,5-7$, nec $17-25 \approx 4-5$.

Hab. in cladodiis emortuis *Rusci Hypophylli* in Tunisia. — *Lept. ruscicola* Karst. et Har. — Syll. IX, p. 785. — sec. cl. Maire l. c. et juxta exempl. orig. dignoscitur peritheciis duplo majoribus, $300-400 \mu$., sporidiisque 1-3-septatis, $24-28 \approx 4-5$.

64. *Leptosphæria Muscari* Hollós, Ann. Mus. Nat. Hungar. VII (1909) 4119
pag. 51. — Peritheciis sparsis v. gregariis, epidermide tectis, depresso-globosis, glabris, nitidis, nigris, ostiolo papillato erumpente, $250-280 \mu$. diam., contextu celluloso; ascis clavatis, breve stipitatis, octosporis, $64-70 \approx 10-12$, filiformi paraphysatis; sporidiis distichis v. interdum oblique monostichis, cylindraceo-oblongis, utrinque rotundatis, curvulis, 2-septatis, ad septa constrictis, 3-guttulatis, flavidulis, demum brunneis, $16-18 \approx 6-7$.

Hab. in caulibus siccis *Muscari comosi* prope Kecskenét Hungariæ.

65. *Leptosphæria Baldratiana* Bacc., *Funghi Eritrea*, Ann. Bot. IV 4120 (1906) p. 274. — Peritheciis minutis; ostiolo prominulo; sub epidermide nidulantibus, in maculis aridis, arcte limitatis, sparsis, $\frac{1}{2}$ mm. et ultra latis; ascis clavulatis $76 \approx 12$, paraphysatis, paraphysibus filiformibus; sporidiis distichis, ellipsoideis transversim 5-6-septatis $23 \approx 5$, hyalinis.

Hab. in foliis *Sansevieriæ Ehrenbergianæ* in montibus Arbaraba et Mahdet Erythræ (PAPP).

66. *Leptosphæria Cordylines* (Speg.) Sacc. et Trott., *Leptosphærella* 4121 *Cordylines* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 381. — Maculis nullis; peritheciis amphigenis adnatis sparsis v. laxissime gregariis e globoso conoideis $100-125 \mu$. diam., ostiolo papillulato perforante præditis; ascis obclavulatis subsessilibus $55-65 \approx 10-12$, aparaphysatis, octosporis; sporidiis fusoideis, di-tristichis, $22-24 \approx 5-6$, flavidulis.

Hab. ad folia arida *Cordylines dracænoidis* in horto Santa Catalina Buenos Aires Rep. Argentina, Amer. austr.

67. *Leptosphæria petkovicensis* Bubák et Ranojevic, Ann. Myc. VIII 4122 (1910) p. 361. — Peritheciis in caulibus æque distributis, globosis, papilla conoidea prominenti præditis, dein parum apertis, nigris, $100-200 \mu$. diam., contextu parenchymatico obscure brunneo; ascis elongatis, utrinque angustatis, supra rotundatis et incrassatis, infra in pedicellum crassum attenuatis, $65-80 \approx 15-20$; sporidiis fusoideis, rectis vel curvulis, utrinque attenuatis, 3-septatis, ad septa non constrictis, $38-50 \approx 4-5$, pallide flavo-stramineis; paraphysibus filiformibus.

Hab. in caulibus siccis *Junci effusi* prope Petkovica, Serbia (Sr. Dozudio).

68. *Leptosphæria Schneideriana* (Rick) Rick in litt., *Trematosphæria* 4123 *Schneideriana* Rick Broteria V (1906) p. 47. — Peritheciis majusculis, 1 mm. diam., atris, immersis, dein semi-immersis, orbiformibus, obtuse ostiolatis, rugosis, carbonaceis; ascis $170-250 \approx 30-40$ (parte spor.), tenuiter tunicatis, octosporis; sporidiis multiseriis, curvulis, fusoideis, primitus hyalinis, denique fuliginis, 3-septatis, $50-60 \approx 12$ (in medio), in septo vix constrictis, cellulis interioribus æqualibus, exterioribus attenuatis; paraphysibus conglutinatis, indeterminatis, stratum mucosum validum ascos superantibus formantibus, hyalinis v. viridulis.

Hab. in *Bambusa*, Rio Grande do Sul, Brasilæ. — *Leptosph. arundinaceæ* (Schw.) Sacc. similis.

69. *Leptosphæria eremophila* (Speg.) Sacc. et Trott., *Leptosphaerella* 4124
eremophila Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)
 p. 381. — Maculis nullis v. melius substrato fere toto sordide are-
 scentis-cinereis; peritheciis globulosis 70-80 μ . diam., sparsis,
 parenchymate innatis, sæpius ad hypophyllum leniter prominulis
 atque ostiolo vix papillato subfimbriato epidermidem perforante
 sed non exerto nigro manifestis; ascis subclavatulis subsessilibus
 v. minutissime pedicellatis, 38-40 \times 8, octosporis aparthysatis;
 sporidiis subfusoides, sæpius inæquilateralibus, 3-septatis, 15 \times 4,
 ad septum medium tantum constrictis, hyalinis v. chlorinis.

Hab. ad folia arida Sporoboli asperifolii in pratis circa
 Mendoza Rep. Argentina Amer. austr.

70. *Leptosphæria intermedia* Niessl, Hedw. XXVI (1887) p. 46-48, 4125
 fig. 3 (sporidia). — Peritheciis et ascis non descriptis; sporidiis
 fusoides, rectis, utrinque acutulis, 5-septatis, 6-guttulatis, ad septa
 constrictulis, coloratis.

Hab. in culmis Calamagrostidis sp. et Sorghi hale-
 pensis in Moravia, Rhenogovia et Hungaria. — *Lept. Fuckelii*
 et *Lept. ogilviensis* affinis. Postremæ habet sporidia similia, sed bre-
 viora et crassiora.

71. *Leptosphæria Sparti* Fl. Tassi, Bull. Lab. Ort. Bot. Siena (1905) 4126
 p. 60, tab. I, fig. 1-4. — Peritheciis seriatis, epidermide velatis
 tandem erumpentibus, globoso-depressis, nigris, 150-200 μ . diam.,
 anguste pertusis; ascis elongato-clavulatis 60-70 \times 10-12, apice ro-
 tundatis, brevissime stipitellatis, paraphysibus, æquilongis, 4-5 μ ,
 crassis obvallatis, 8-sporis; sporidiis distichis, oblongis, rectis vel
 curvulis, 2-septatis ad septa constrictis, loculo medio subgloboso
 paulo crassiore, eguttulatis, flavidis, 16-18-20 \times 7-7,5-8.

Hab. in culmis vaginisque Lygei Sparti in horto botanico
 Senensi Italiæ. — Verisimiliter statui escophoro spectant formæ
 inferiores ad genera *Diplodinula*, *Stagonosporina*, *Microdiplodia*,
Hendersonulina, *Stagonospora*, *Hendersonia* pertinentia, teste Tassi.

72. *Leptosphæria cumulata* Kirschst., Verh. Bot. Ver. Brandenburg 4127
 XLVIII (1906) pag. 56. — Peritheciis arcte confertis, globosis,
 nigris, mollibus, basi hyphis brunneis obsitis, ostiolo punctiformi
 prominulis, v. omnino immersis; ascis elongato-clavatis, supra ro-
 tundatis, breviter pedicellatis, 105-120 \times 8-10, octosporis; sporidiis
 cylindræis, primum hyalinis, dein flavis, usque 12-ocularibus,
 loculo tertio globoso prominenti, distichis v. oblique pluries seria-
 tis, rectis, guttulis, 40-50 \times 3-4; paraphysibus filiformibus.

Hab. in culmis putrescentibus Phragmitis, Gross-Behnitzer See Germaniæ. — A *L. graminis* (Fuck.) peritheciis immersis, ascis sporidiisque minoribus angustioribusque diversa.

73. *Leptosphæria lwamotoi* I. Miyake, Pilze Reispfl. Japan (Journ. 4128 College Agricult. Tokyo, II (1910) p. 249, t. XIII, f. 18-19. — Peritheciis globosis immersis papilliformi-prominentibus, obscure brunneis, 75-125 μ . diam.; ascis elongato-cylindraceutis, 55-60 \times 11-13, octosporis, paraphysibus æqualiter incrassatis dimidiam asci partem vix æquantibus; sporidiis distichis, ellipsoideis, brunneis, biseptatis, ad septa constrictulis, granuloso-farctis, 12,5-18 \times 3,7-5.

Hab. in foliis Oryzæ sativæ in Japonia.

74. *Leptosphæria Spegazzinii* Sacc. et Syd. — Syll. XIV p. 570. — 4129 var. *minor* Spegazzini, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 383. — Peritheciis 100-120 μ . diam., ascis 60-65 \times 10; sporidiis 16-18 \times 4-4,5.

Hab. ad culmos Sacchari offeinarum prope Ledesma, Jujuy, Argentina Amer. austr. — Varietas a typo (*L. Sacchari* Speg. non Bred) omnibus partibus conspicue minoribus recedit.

75. *Leptosphæria kerguelensis* P. Henn., Deutsche Südpolar-Exped. 4130 Bd. VIII (1906) Extr. p. 11, tab. II, fig. 7 a, b. — Peritheciis innato-suberumpentibus, ostiolatis, amphigenis, subglobosis, atro-membranaceis, 150-180 μ . diam.; ascis clavatis, apice obtuse rotundatis, basi curvatis, octosporis, 50-70 \times 10-17; paraphysibus filiformibus, hyalinis, 1-1,5 μ . cr., flexuosis; sporidiis subdistichis v. subtristichis, fusoides, utrinque rotundatis, 3-septatis, constrictiusculis, rectis vel curvulis, flavo-olivaceis, dein atro-fuscis, 15-20 \times 5-7.

Hab. in foliis Festucae kerguelensis, Kerguelen-Station prope Zeltlager (E. WERTH).

76. *Leptosphæria culmifraga* (Fr.) Ces. et De Not. — Syll. II, p. 75 4131 — var. *alpestris* Rehm, Oest. bot. Ztschr. LVI (1906) p. 297. — (Nomen nudum).

Hab. in culmis Graminacearum, Zittertal sub Pfitscher-Joch, Austria.

77. *Leptosphæria larvalis* Saccardo, Fungi aliquot africani, Bol. Soc. 4132 Broteriana v. XXI (1904-1905) p. 5. — Peritheciis hinc inde laxe gregariis, innato-erumpentibus, globulosis, 300-400 μ . diam., obsolete papillatis, nigris, glabris, membranaceo-coriacellis; contextu grosse parenchymatico, fuligineo-rufescenti; ascis e cylindraceuto subclavatis, deorsum tenuatis, apice obtusis, 170-190 \times 25, filiformi-

paraphysatis, octosporis; sporidiis distichis cylindraceo-fusoideis, magnis, $80-85 \times 10-12$, utrinque obtuse tenuatis, sæpius curvulis, $10-11$ -septatis, non constrictis, fusco-olivaceis, grosse $11-12$ -nucleatis, nucleis pallidioribus, articulo altero supra medium paullulo crassiore.

Hab. in caulibus emortuis *Equiseti pallidi* in insula S. Thiago Cabo Verde, Africa (comm. A. MOLLER). — Ab affini *L. Equiseti* ascis sporidiisque multo majoribus imprimis differt.

78. *Leptosphæria Geasteris* Hollós, Ann. Mus. Nat. Hungar. V (1907) 4183 p. 279. — Peritheciis gregariis v. sparsis, erumpentibus, depresso-globosis, fuscis, apice pertusis, $170-210 \mu$. diam., contextu parenchymatico; ascis cylindraceis, breve stipitatis, $6-8$ -sporis, $60-70 \times 7-8$, filiformi-paraphysatis; sporidiis distichis, fusoideis, rectis vel leviter curvulis, 5 -septatis, flavidulis, $18-22 \times 3-4$.

Hab. in stratu interno exoperidii *Geasteris pseudolim-bati*, prope Kecskemét Hungariæ.

79. *Leptosphæria fibrincola* v. Höhn. et Rehm, Ann. mycol. (1905) 4184 p. 228, Rehm. Ascom. Exicc. n. 1591. — Peritheciis dispersis, primitus innatis, dein emergentibus, globulosis, papillula minima vix conspicua, demum urceolato-collabentibus, ad basim hyphis crebris, simplicibus, septatis, fuscis, longis, $3-4 \mu$. lat., chartam longe percurrentibus, versus apicem setulis acutis, fuscis, brevibus sparsis obsessis $250-300 \mu$. diam.; contextu parenchymatico, fusco; ascis clavatis, apice rotundatis, $4-8$ -sporis, $70-80 \times 10-12$; sporidiis oblongis, rectis, transverse 3 -septatis, ad septa interdum paullulum constrictis, cellula secunda latiore, hyalinis, dein dilute flavidulis, $20 \times 4-4.5$, distichis, paraphysibus filiformis, septatis, 3μ . cr.

Hab. ad chartam putridam, Augustæ Vindelicorum (BRITZELMAYR). — A *Leptosph. papyricola* et *Lept. (Pocosphæria) setulosa* satis distincta.

80. *Leptosphæria Typharum* (Desm.) Karst. — Syll. II, pag. 64 — 4185

**Leptosphæria papyrogena* Sacc. Ann. Mycol. VI (1908) p. 558. — A typo differt ascis longioribus, nempe $130-160 \times 15-20$; sporidiis paullo majoribus, $30 \times 11-12$, pariter olivaceo-melleis; peritheciis $200-250 \mu$. diam. charticolis.

Hab. in charta putrida, Rigny sur Arroux Galliæ, Majo 1908 (FLAGEOLET).

Subg. *Xenosphæria* Trev. Species lichenicolæ.

81. *Leptosphæria bæomycearia* (Linds.) Sacc. et Trott., *Microthelia* 4136
bæomycearia Linds. Lichenic. Microfungi, p. 541, t. XXIV, f. 6
 (1869). — Peritheciis minutissimis, dense gregariis, nigris, punctiformibus, globulosis, basi immersis; ascis (non descriptis); sporidiis oblongo-fusoideis, utrinque obtusulis, majusculis, 3-septatis, ad septa constrictis, sæpe 4-guttulatis, brunneis, 24-26 \times 7-8.

Hab. in thallo *Bæomycetis* (Sphyriddii) rufi, Balthayock.
 — Verisimiliter eadem ac *Lept. sphyriddiana* (Lahm, 1874) Wint.
 — Syll. IX, p. 796.

POCOSPHERIA Sacc. Syll. II p. 32, XI p. 325, XIV p. 571, XVI p. 518.

1. *Pocosphæria Dendromeconis* Earle, Bull. of the New York Bot. 4137
 Gard. (1904) p. 293. — Peritheciis lineariter gregariis, infossis dein erumpentibus, primum pilis brevibus brunneis vestitis, demum subglabratis, nigris, duris, subcarbonaceis, non collabescentibus, 250-350 μ . cr., ostiolo inconspicuo; ascis cylindraceis 100-120 \times 9-10; paraphysibus copiosis, filiformibus; sporidiis monostichis, pallide fuscis v. flavidis, 3-septatis, ad septa constrictis, loculo medio leniter inflato, cellulis extremis conoideis acutisque, ceteris rotundatis, 18-20 \times 7-8.

Hab. in ramis emortuis *Dendromeconis* prope Stanford Univ. California Amer. bor. (LE ROY ABRAMS).

2. *Pocosphæria balcanica* v. Höhn., Fragm. z. Myk., in Sitzb. k. Ak. 4138
 d. Wissensch. Wien, Bd. CXVI, Abt. I (1907) p. 111. — Peritheciis immersis in areis nigricantibus, lineatis, 2-10 mm. long. stromatoideis gregarie insidentibus, membranaceo-firmis, nigris, globosis, apice in rostellum crassiusculum conoideo-attenuatis, 200-350 μ . lat., basi hyphis firmis sæpe fasciculatis, obscure brunneis, 8-12 μ . cr. apice setulis obtusis, brunneis, plerumque quadrilocularibus, 80 \times 6-7 præditis; paraphysibus numerosis, filiformibus; ascis crasse clavatis, sessilibus, supra rotundatis, crasse tunicatis, octosporis 105-140 \times 22-26; sporidiis 2-3-stichis, cylindraceo-clavatis, utrinque rotundato-obtusis et angustatis, semper sexlocularibus, pallide brunneis, apice utrinque cupula mucosa subhemisphærica vestitis, 40-44 \times 10-11.

Hab. in caulibus siccis *Veronicæ gentianoideis*, Cej in

Romania (LOITLESBERGER). — *L. Morthierianæ* Sacc. verisimiliter affinis.

VENTURIELLA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 379. (Etym. a *Venturia* cujus est analogum genus). — Perithecia superficialia subiculo destituta, hirsuta. Asci octospori paraphysati; sporidia fusioidea pluriseptata, olivascentia. — Est *Venturia* phæophragmospora.

1. *Venturiella argentinensis* Speg. l. c., pag. 379 cum icon. — Peritheciis lenticulari-subhemisphaericis, 120-140 μ . diam., pilis minutis unicellularibus 40-60 \approx 4-6; ascis subcylindraceis breviter pedicellatis 70-75 \approx 8-9; sporidiis 5-septatis, 18-20 \approx 4-5, e chlorino olivaceis.

Hab. ad strata lignea ramorum excæsum subputrescentium Pirconia dioica in Silva Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr.

MASSARIA De Not. — Syll. II p. 2, IX p. 759, XI p. 319, XIV p. 561, XVI p. 510, XVII p. 732.

1. *Massaria bihyalina* v. Höhn. Fragm. Mykol. IX (1909), in Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1503. — Peritheciis ligno v. cortice immersis, sparsis, sæpe seriatis, raro 2-3-approximato-confluentibus, depresso globosis, 800 μ . circ. diam., 470-520 μ . alt., rostello tunc verruciformi tunc usque ad 2 mm. longo, 350-400 μ . cr., apice ostiolato præditis; contextu nigro, coriaceo, opaco 40 μ . cr.; rostello basi sæpe breviter setuloso, primum viridi-pulveraceo demum nigro glabro; paraphysibus immersis, ascos superantibus, mucosis, guttulatis, 2-2,5 μ . cr.; ascis tenuiter tunicatis, clavatis, basi in pedicellum 36-44 \approx 3-6 abrupte angustatis, supra rotundatis 170-200 \approx 16-21, plerumque octosporis; sporidiis mono- v. distichis, ellipsoideo-fusioideis, plerumque 6-localaribus, crasse tunicatis, 32-44 \approx 11-12; loculis terminalibus hemisphaericis v. obtuse conoideis, hyalinis, tenuiter tunicatis, 3-4 μ . long., loculis 4 intermediis crasse tunicatis, brunneis, contenu oleoso præditis, ad septa non constrictis, loculis 2 internis 9-10 μ . ceteris 5 μ . longis.

Hab. in ramis putrescentibus Berberidis vulgaris prope Ybbsitz in Austria inf. (P. LAMBERT). — A cæteris speciebus in *Berberide* vigentibus bene distincta.

2. *Massaria galeata* v. Höhn. Ann. Mycol. (1905) p. 403 cum icon. — Peritheciis globosis parum depressis et mutua pressione sub-

angulosis, ostiolo vix conspicuo, brunneis, contextu membranaceo-coriaceo, 400-500 μ . diam., solitariis v. usque ad 20 valsiformi-aggregatis, sub peridermio nidulantibus et fere semper tectis; ascis clavatis, 170-200 \times 33-40, plerumque octosporis; paraphysibus numerosis, multiguttulatis, filiformibus; sporidiis distichis v. tristichis, brunneis 6-raro 7-ocularibus, crasse tunicatis, ad septa non constrictis, elongato-cylindraceis, utrinque rotundatis, 42-58 \times 14-16, apice utrinque strato mucoso lato, campanuliformi tectis et tunc usque ad 76-86 μ . long.

Hab. ad ramulos *Aceris Pseudoplatani* prope Mödling et Puchberg Austriæ inferioris.

3. *Massaria Aceris* (Schulzer) Sacc. et Trav. Syll. XX p. 28., *Splanchnonema Aceris* Schulz. v. Mügg. in Verhandl. zool-bot. Gesellsch. Wien (1865) p. 795, t. XVI, fig. 4 (sine diagnosi). — Peritheciis (non descriptis); sporidiis (ex icone) initio hyalinis oblongis, didymis, 4-guttatis, maturis cylindraceis, utrinque obtuse rotundatis, 5-septatis, ad septa subconstrictis, septulo 1 longitudinali auctis, fuligineis, strato mucoso tenui (ut videtur) cinctis.

Hab. in ramis *Aceris campestri*s in Hungaria. — Ignotis peritheciis et dimensionibus fructificationis species omnino incerta. — An *Pleomassaria*?

4. *Massaria scoparia* Rehm, Ann. Mycol. IV (1906) p. 402. — Peritheciis dispersis, sub peridermio nidulantibus, papillula minima prominente, globulosis, atris, parenchymatice contextis, glabris, 350 μ . diam.; ascis clavatis, crasse tunicatis, 90-110 \times 18-25, octosporis; sporidiis oblongis v. oblongo-clavatis, utrinque rotundatis, 3-septatis, medio, minus ad cetera septa, subconstrictis, fuscis, demum episporio scabriusculo, strato mucoso lato obductis, 21-25 \times 8-10, distichis; paraphysibus filiformibus.

Hab. in caulibus emortuis *Sarothamni scoparii* prope Rüdelsbrunn Germaniæ (REHM). — A *M. stipitata* Feltg. diversa.

5. *Massaria theicola* Petch, Ann. Roy. Bot. Gard. Peradenyia III, Pt. I (1906) p. 3. — Peritheciis gregariis, in cortice omnino immersis, nigris, 0,25-0,3 mm. diam.; ascis anguste cylindraceis, 120-160 \times 20, octosporis; paraphysibus paucis, septatis; sporidiis oblique monostichis, hyalinis, continuis, deinde biseptatis, olivaceis, anguste ovatis, loculo medio sæpe nigriore, in guttam expulsis, 17-22 \times 6-7.

Hab. in ramulis nigrificatis *Theæ viridis*, Ceylon.

6. *Massaria Xylostei* Hazsl. Sphær. Hung. pag. 174, t. XII, f. 49

(1893). — Similis *M. Piri*; sporidiis (ex iconē) breviter fusoides, brunneis, utrinque acutatis, strato mucoso hyalino crasso obvolutis, 4-nucleatis, nucleis extimis triangularibus, mediis transverse ellipsoideis, dein pseudo-4-ocularibus, loculis mediis angustioribus.

Hab. in ramis *Lonicerae Xylostei* in Hungaria.

7. *Massaria argentinensis* Speg. An. Mus. Nac. Buenos Aires t. XIX 4146 (1909) p. 380. — Peritheciis primo cortice tectis dein cum cortice secedentibus, lenticulari-subhemisphaericis, 250-350 μ . diam., minute ostiolato-pertusis; ascis cylindraceis brevissime pedicellatis, paraphysatis, 180-200 \times 18-22, octosporis; sporidiis 3-septatis 35-40 \times 14-18 pulchre fuliginis, primo mucoso-vestitis.

Hab. ad ramos putrescentes *Oleæ europææ*, Chacarita, Luchæ grandifloræ, Santa Catalina, *Macluræ aurantiacæ*, Marmol, Argentina Amer. austr.

8. *Massaria Fraxini* Hazsl. Sphær. Hung. (1893) pag. 174, t. XII, 4147 f. 49 e. — Peritheciis (non descriptis); sporidiis elongato-fusoides, rectis, 5-septatis, 6-guttatis, non constrictis, utrinque acutis, brunneis, strato mucoso hyalino crasso obvolutis.

Hab. in cortice *Fraxini* in Hungaria.

9. *Massaria texana* Rehm, Ann. Mycol. V (1907) p. 517. — Peritheciis dispersis, cortice innatis, globosis, 0,3-0,4 mm. diam., e cortice ibi denigrato protuberantibus, poro minutissimo pertusis; ascis cylindraceis, apice rotundatis, 100 \times 10, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, haud constrictis, subfuscis, 12-14 \times 7-8, strato tenui mucoso obductis, 1-stichis, paraphysibus filiformibus, guttulatis, 1,5 μ . cr.

Hab. in cortice *Quercus* (Spanish), Texas Amer. bor. (LONG, ATKINSON). — *Massaria stipitatae* affinis.

10. *Massaria platanoides* Rehm, Ann. Mycol. IV (1906) p. 336. — 4149 Peritheciis gregariis, cortice interiori haud mutato, subdealbato innatis, globulosis, 0,5-0,7 mm. diam., papillula semiglobosa, atra, corticem dealbatum perforantibus; ascis cylindraceis, c. 150 \times 15, octosporis; sporidiis oblongis utrinque rotundatis, 3-septatis, cellulis massariæformiter ellipsoideis, interdum cellula una media iterum septata 5-cellularibus, fuscis, primitus cellulis apicalibus subhyalinis, non perpendiculariter divisis, 22-25 \times 10-12, ad septa haud constrictis, strato tenui mucoso obvolutis, 1-stichis; paraphysibus filiformibus, teneris, septatis, guttulatis, 3 μ . cr.

Hab. in cortice trunci dejecti spec. indet., Lyndonville N. Y.

Amer. bor. — Affinis *Massariæ Platani*, a qua sporidiis et peritheciis amplioribus recedit.

CLYPEOSPHÆRIA Fuck. — Syll. II p. 90, IX p. 798, XI p. 326, XIV p. 572, XVI p. 518, XVII p. 732.

1. *Clypeosphæria myrticola* Spegazz., An. Mus. Nac. Buenos Aires 4150 t. XIX (1909) p. 381. — Peritheciis adnatis epidermide velatis, laxe gregariis, atris, nitidulis, e lenticulari subhemisphæricis 180-200 μ . diam.; ascis cylindraceis brevissime pedicellatis, paraphysatis, 110-120 \times 22-26, octosporis; sporidiis distichis ellipsoideis 3-septatis, ferrugineo-fuligineis, 30-32 \times 15-16.

Hab. ad ramulos vivos *Eugenie* cujusdam in silvis prope Formosa Rep. Argentine Amer. austr. — Species notis nonnullis licheninis donata sed thallus adhuc omnino nullus visus.

2. *Clypeosphæria chilensis* Speg., Fungi Chilenses (1910) p. 81. — 4151 Peritheciis cortice innatis, epidermide circa ostiolum minute nigricata tectis, parvis lenticulari-subglobosis, subcarbonaceis, 180-350 μ . diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, dense paraphysatis, 120-150 \times 14-30; sporidiis mono-v. distichis, ellipsoideis, utrinque subacutiusculis, pulchre fuligineis, mediocribus, 3-septatis, non v. vix constrictulis, loculis nucleis lenticularibus v. semilunaribus præditis, 30-35 \times 10-14.

Hab. in ramis emortuis *Eugenie* cujusdam in silvis prope Serro de Caracol de Concepcion Chile Amer. austr.

3. *Clypeosphæria? theobromicola* Spegazz., Micromicetos de los Ca- 4152 caoyeros, Rev. Facult. Agronom. y Veter. La Plata t. II (1906) nn. 4-6, p. 305, fig. B. — Peritheciis laxiuscule inordinateque gregariis, cortice leniter sordideque dealbato v. pallescente innato-superficialibus, plus minusve nudis v. sæpe fere totis tenuiter velatis, superne modice hemisphærico-prominulis, mediocribus (0,50-1 mm. diam., 0,40-0,50 mm. altis), inferne applanatis, carbonaceis duris, rigidis, intus nucleo mucoso albidō farctis; ascis cylindraceis, antice obtuse rotundatis postice cuneatis breviter crasseque pedicellatis 80-100 \times 10-15, paraphysibus filiformibus densis subcoalescentibus obvallatis, 8-sporis; sporidiis sæpius oblique monostichis, ellipsoideis v. leniter navicularibus, utrinque obtusiusculis 18 \times 8, primo 6-blastis, serius 5-septatis, ad septa leniter constrictis, hyalinis.

Hab. in cortice *Theobromæ Cacao*, Bahia de Todos los

Santos Brasiliæ (HEMPEL). — Fungus lichenoides, *Pyrenulæ* proximus.

4. *Clypeosphæria Asparagi* (Fuck.) Wint. — Syll. IX, pag. 798 — 4158
var. *montenegrina* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906)
p. 403. — A typo differt sporidiis minoribus 15,5-17,5 \times 4-5, re-
ctis, raro curvulis.

Hab. in caulibus emortuis *Asparagi verticillati* prope
Rijeka Montenegro.

5. *Clypeosphæria* ? *valparadisiensis* Spegazz. Fungi Chilenses (1910) 4154
pag. 81 cum icon. — Peritheciis gregariis sæpius longitudinaliter
seriatis, epidermide stromatice nigrificata tectis, lenticularibus mi-
nutis coriacellis 150-200 μ . diam.; ascis subclavulatis breviter pe-
dicellatis dense paraphysatis, 110-130 \times 20; sporidiis distichis sub-
fusoides non v. vix inaequalateralibus mediocribus 3-septato-con-
strictulis olivaceo-fuligineis, tunica mucosa tenui obvolutis, 34-
42 \times 9-12.

Hab. in culmis vetustis putrescentibus *Chusqueæ Cumin-*
gii Cerro Alegre de Valparaiso Chile Amer. austr.

6. *Clypeosphæria minor* Starb., Ascom. Schw. Chaco-Cordill. Exp., 4155
Arkiv f. Bot. Bd. V (1905) pag. 25. — Peritheciis gregariis im-
mersis lenticulariter sphærioides vertice applanato-convexulo, cum
cortice atrato concrecente, perpauillum illum elevantibus, centro
lenissime papillulatis demum poro minutissimo perforatis, atratis,
contextu carbonaceo, membranaceo, c. 200-250 μ . diam.; ascis
octosporis, late cylindræis, sursum rotundatis, sessilibus, 100-125
 \times 24-25; sporidiis distichis, ellipsoideis vel ellipsoideo-oblongatis,
primo triseptatis, loculis uniguttulatis, deinde sæpe quinque-septa-
tis, ad septa constrictulis, vetustis obsolete septatis, vix muco te-
nuissimo obvolutis, 23-32 \times 10-12; paraphysibus copiosissimis fili-
formibus, ramulosis, hyalinis.

Hab. in ramulis aridis pr. Laguna de la Brea, prov. Jujuy,
Argentina. — A *C. massariospora* Starb. peritheciis minoribus,
sporidiis majoribus plane differt.

7. *Clypeosphæria splendens* Rick, Broteria V (1906) p. 48. — Pe- 4156
ritheciis 0,5 mm. latis, clypeo 1-2 mm., nigro, orbiculari, splen-
dente, ostiolo brevi; ascis 150 \times 13-15, tenuibus, apice incrassatis,
sporidiis cylindræis, 26-32 \times 7, vix curvulis, constanter triseptatis,
initio hyalinis, dein chlorinis; paraphysibus hyalinis, dilutis, 2 μ .
latis, septatis, non ramosis.

Hab. in epidermide Bromeliaceæ cujusdam epiphytæ, Rio Grande do Sul Brasilæ.

MELANOMMA Nits. et Fuck. — Syll. II p. 98, IX p. 801, XI p. 327, XIV p. 573, XVI p. 522, XVII p. 733.

1. **Melanomma suldensis** Rehm, Ann. Mycol. V (1907) pag. 539. — 4157
Peritheciis dispersis, sessilibus, globosis, minutissime papillulatis, atris, glabris, ad basim hyphis nonnullis fuscis obsessis, carbonaceis, 400 μ . diam.; ascis cylindraceis, 90-100 \approx 12, tetrasporis; sporidiis ellipsoideis, 3-septatis, cellula secunda latiore, utrinque subattenuatis, ad septa subconstrictis, rectis, quaque cellula guttam oleosam magnam includente, hyalinis, demum subfuscis, 21-25 \times 6-8, monostichis; paraphysibus filiformibus septatis, hyalinis, 4 μ . crassis.

Hab. ad caulem? Cerastii emortui inter moles glaciales supra Suldën, Ortler Tirolæ (Dr. REHM). — Proximæ species: *M. rubinum* Karst. sporidiis utrinque obtusis, curvulis, peritheciis erumpentibus differt; *M. Dryadis* Johans. peritheciis erumpentibus crustaceo-congestis, sporidiis haud guttatis diversa.

2. **Melanomma glaciale** Rehm, Oesterr. bot. Zeitschr. LVI (1906) 4158 pag. 294. -- (Nomen nudum);

Hab. in caulibus Cerastii latifolii Alpeiner-Gletscher Stubbai, Austria.

3. **Melanomma Mate** Spegazz., An. Mus. Nac. Buenos Aires t. XVII 4159 (1908) p. 126. — Peritheciis hemisphæricis 75-100 μ . diam., plus minusve laxè gregariis, nigris, subcarbonaceis, basi tantum matriçi insculptis, matrice sordide infuscata insidentibus; ascis clavulatis breviter pedicellatis 60 \approx 8-10, paraphysatis; sporidiis ellipsoideo-subfusoideis, 3-septatis ad septa leniter constrictulis, loculis grosse 1-guttulatis, 12-15 \approx 3-4, fuliginèis.

Hab. in superficie interna truncorum cariosorum Illicis paraguariensis in silva circa S. Pedro, Argentinæ Amer. austr.

4. **Melanomma Trevoæ** Speg., Fungi Chilenses (1910) p. 76. — Peri- 4160
theciis in ligno denudato, laxè vel dense gregariis, insidentibus, globoso-depressis, minutis, glabris, atro-carbonaceis, vix papillato-ostiolatis 150-200 μ . diam.; ascis cylindraceis breviter pedicellatis densiuscule paraphysatis, 100 \approx 6-8; sporidiis parvis elliptico-subclavulatis pallide fuliginèis, 3-septatis, leniter constrictulis, loculo mediano supero sæpius nonnihil crassiore, 14-15 \approx 4-6.

Syll. fung. XXII (VI-1912)

Hab. in ramis emortuis *Trevoæ trinervis* in collibus San Bernardo prope Santjago, Chile, Amer. austr.

5. *Melanomma sordidissimum* Spegazz., An. Mus. Nac. Buenos Aires 4161 t. XIX (1909) p. 384. — Peritheciis ligno latissime nigrificato insidentibus, dense constipatis sæpe pseudostromate heterogeneo coniunctis, carbonaceis, 90-100 μ . diam.; ascis e cylindraceo subfusoides brevissimeque pedicellatis 50 \times 10, octosporis, paraphysatis; sporidiis cylindraceo-ellipsoideis primo didymis serius 3-septato-constrictis, rectis vel leniter curvulis, 10-12 \times 5-5,5 obscure fuliginosis.

Hab. ad ramos decorticatos emortuos *Eriobotryæ japonicæ* in horto Santa Catalina prope Buenos Aires, Argentina Amer. austr.

6. *Melanomma Ceratonizæ* Roll. in Bull. Soc. Mycol. Fr. (1905) p. 24, 4162 tab. I, f. 2. — Peritheciis gregariis, carbonaceis, globosis, papillatis, 0,5 mm. latis e ligno erumpentibus; ascis oblongo-clavatis, pedicellatis, 130-140 \times 20-25, paraphysibus exiguis obvallatis, octosporis; sporidiis distichis v. subtristichis, tereti-oblongis, utrinque leviter rotundato-attenuatis, curvulis raro rectis, crasse 8-septatis, ad septa præcipue medium constrictis, guttulatis, griseo-virentibus, dein brunneis, 30-32 \times 10.

Hab. in ligno vetusto *Ceratonizæ Siliquæ*, Can Carrió in insulis Balearibus. — *Mel. Passerinii* et *M. nigrisepto* affine.

7. *Melanomma andinum* Speg., An. Mus. Nac. Buenos Aires t. XIX 4163 (1909) p. 383. — Maculis nullis; peritheciis primo tectis, dein denudatis sparsis v. pauci-aggregatis, carbonaceis, lenticulari-depressis, 150 μ . diam., vix papillulato-ostiolatis, subpruinulosis; ascis clavatis brevissime stipitatis, 100 \times 20, octosporis, pseudoparaphysatis; sporidiis e cylindraceo ellipsoideis, 3-septatis, 27-29 \times 10, fusco-fumosis.

Hab. ad ramos dejectos putrescentes *Bulnesiæ Retamo* in andinis Upsallata, prope Mendoza, Argentina Amer. austr.

8. *Melanomma Sambuci* Earle, Bull. of the New York Bot. Gard. 4164 (1904) p. 291. — Peritheciis gregariis, sæpe confertis, primum infossis sed mox erumpenti-superficialibus, nigris, globosis, rugosis, non collabescentibus, circ. 300-350 μ . diam., ostiolo obscure papillato; ascis clavato-cylindraceis 90-110 \times 9-10; paraphysibus copiosis, filiformibus; sporidiis monostichis, fuscis, anguste ellipsoideis vel anguste ovoideis, 3-septatis, leniter constrictis, loculo medio sæpe leniter inflato, 20-25 \times 7-8.

Hab. in ramis emortuis Sambuci, Snow Valley Peak, Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

9. *Melanomma? præandinum* Spegazz., An. Mus. Nac. Buenos Aires 4165 t. XIX (1909) p. 384. — Peritheciis plus minusve seriatis confertis superficialibus ligno denudato rimulosoque insidentibus, atris, glabris, subglobosis, minutis; ascis subcylindraceis, breviter crassiusculeque pedicellatis 120-150 \times 14-15, octosporis, paraphysatis; sporidiis elongato-subfusoideis 5-(rarius 7-) septatis, leptosphærioides, 40-50 \times 5-6, ad septa non v. vix constrictulis, loculo medio superiore incrassatulo primo chlorinis, serius pallide olivaceis.

Hab. ad caules aridos Salviæ Gilliesi in præandinis Chachenta, prope Mendoza, Argentina Amer. austr.

10. *Melanomma cacheutense* Spegazz., An. Mus. Nac. Buenos Aires 4166 t. XIX (1909) p. 383. — Peritheciis superficialibus confertis subglobosis, 150-180 μ . diam., eximie minuteque papillato-ostiolatis, atris, glabris; ascis subclavulatis basi pedicello brevi gracili præditi, 100-120 \times 16-18, paraphysatis, octosporis; sporidiis e cylindraceo subclavulatis, 5-septatis ad septa omnia constrictis, olivaceis, 26 \times 8-10, rectis v. leviter curvulis, oculis centralibus sæpius minute 1-guttulatis.

Hab. ad ramos emortuos decorticatos Baccharidis glutinosæ, in alveo fluminis Mendoza prope Cacheuta Argentina Amer. austr.

11. *Melanomma chilense* Spegazz., Fungi Chilenses (1910) p. 75 cum 4167 icon. — Peritheciis superficialibus, hinc inde constipatis, globosis, subparvis, atris, glabris, opacis carbonaceis, vix papillato-ostiolatis, 350-500 μ . diam.; ascis subcylindraceis primo octosporis, serius sæpius tetrasporis, breviter, pedicellatis dense paraphysatis, 140-150 \times 20; sporidiis distichis fusoideis utrinque acute 5-septatis, loculo mediano supero doliiformi maximo, fuligineis, majusculis, 20 \times 12-15.

Hab. in ramis emortuis Proustiae pungentis prope Batuco Chile Amer. austr.

12. *Melanomma fuscidulum* Sacc. — Syll. II, p. 99. — f. *populinum* 4168 Rehm, Ascom. exsicc. fasc. 37, n. 1665, Ann. Mycol. IV (1906) p. 408. — A typo differt peritheciis plerumque omnino liberis, rarius basi leviter adnatis.

Hab. in cortice Populi piramýdalis emortuo prope Neufriedenheim Bavaria (RHEM).

13. *Melanomma Juniperi* Ellis et Everh. ap. Fairm. The Pyren. of 4169

Orleans County in Proc. Rochest. Acad. (1905) p. 190. — Peritheciis superficialibus basi leniter in ligno insidentibus, globosis, nigris, latis, sparsis v. quandoque lenissime confertis, ostiolo parvo prominulo submastoideo præditis; ascis cylindræis, angustis; sporidiis fusoidis, brunneis, 3-5-septatis, duobus cellulis mediis inflatis, terminalibus angustioribus, $40 \approx 10-12$.

Hab. in ramis languidis Juniperi virginianæ, Lyndonville N. Y. Amer. bor. *

14. *Melanomma junipericola* Rehm, Oesterr. botan. Zeitschr. LVI 4170 (1906) p. 293. — (Nomen nudum).

Hab. in ramulis Juniperi nanæ, Alpeiner-Alpe Stubai Austria.

15. *Melanomma anceps* v. Höhn. in Stzb. k. Ak. d. Wissensch. Wien 4171 CXVIII, Abt. I (1909) p. 330. — Peritheciis superficialibus, sparsis, globosis, supra parum depressis, verrucoso-rugulosis, fragiliter subcarbonaceis, 600-700 μ . diam.; parietibus 80-180 μ . cr. nigro-violaceis, parenchymaticis; paraphysibus numerosis late filiformibus, mucosis; ascis tenuiter tunicatis, clavatis, utrinque sensim angustatis, octosporis, $110 \approx 13$; sporidiis distichis, elongatis, utrinque angustato-obtusis, rectis v. curvulis, tenuiter tunicatis, $30-36 \approx 6-7,5$ diu hyalinis et bilocularibus, demum pallide violaceis et quadrilocularibus, ad septa non constrictis, loculis mediis angustioribus.

Hab. in caulibus putrescentibus Monocotyledoneæ ejusdam, Buitenzorg in ins. Java.

16. *Melanomma epiphytica* Raciborski, Bull. Ac. Sc. Cracovie (1909) 4172 p. 387. — Hypothallo 1-3 cm. lato, crasso, nigro-carbonaceo, arcte adnato, pilis simplicibus septatis brevibus nigris horizontaliter patentibus dense tecto; peritheciis in centro plagarum plerumque evolutis, hemisphæricis, parietibus crassis validis et superficie inæquali præditis, nigro-carbonaceis, fragilibus, apice depresso ostiolatis, intus mucosis; paraphysibus filiformibus numerosissimis; ascis elongato-cylindræis $320-380 \approx 25-29$, crasse tunicatis, octosporis; sporidiis monostichis, $60-80 \approx 19-22$, levibus, brunneis, medio constrictulis, elongato-ovoideis, quadrilocularibus, raro 2-3-locularibus.

Hab. in culmis ramulisque vivis Bambusarum frequens prope Buitenzorg in ins. Java.

17. *Melanomma glumarum* I. Miyake, Pilze Reispfl. Japan in Journ. 4173 Colleg. Agricult. Tokyo, II (1910) pag. 242, t. XIII, f. 1-3. — Peritheciis in pagina super. glumarum sparsis, globosis v. ellip-

soideis, nigris, ostiolatis, 150 μ . circ. diam.; ascis cylindræis breviter pedicellatis, plerumque curvulis, 70-90 \approx 10, octosporis; sporidiis distichis, fusoides, plerumque incurvatis, obscuris, 24-30 \approx 4-5, triseptatis, 1-2 guttulatis; paraphysibus non visis.

Hab. in glumis *Oryzæ sativæ*, Soochou Sinarum (I. Miyake).

18 *Melanomma Xylariæ* v. Höhnelt, *Ergeb. Bot. Exp. Südbres.* 1901, 4174

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 24.

— Peritheciis superficialibus in greges rotundatos 0,5-1,5 mm. latos arcte confertis, globosis v. obconoides, sæpe subtympaniformibus, supra nitidulis, plerumque depressis et umbilicatis, basi rugulosis, opacis, coriace-carbonaceis, demum sæpe collabescentibus 350-450 μ . diam.; ascis octosporis, clavatis, breviter pedicellatis, 100-120 \approx 12-14; paraphysibus numerosis, filiformibus, ascos superantibus, mucosis; sporidiis plerumque distichis, quadrilocularibus, fusoides, utrinque angustatis, obtuse rotundatis, loculo medio brunneo, loculis terminalibus subhyalinis, septo medio plerumque subangustatis, 28-40 \approx 5-6.

Hab. parasitice in *Xylaria polymorpha*, Alto da Serra Sao Paulo Brasiliæ. — *Mel. anglico* (PLOWR) affinis species.

TREMATOSPHERIA Fuck. — Syll. II p. 115, IX p. 811, XI p. 329, XIV p. 575, XVI p. 524, XVII p. 734.

1. *Trematosphæria euganea* Gaia, *Flor. micol. prov. Padova*, p. 21 4175

(sunto litogr.). — Peritheciis solitariis, rarius 2-3 proximatis, nigris, carbonaceis, sphæricis, tenaciter putamini infixis et basi vix subimmersis, 700-900 μ . diam., ostiolo mediocriter papillato, cylindræo, crasso, ad apicem conice sæpe obtruncato atque pertuso; ascis clavatis, breviter stipitatis, 190-210 μ . longis; paraphysibus filiformibus guttulatis; sporidiis irregulariter distichis, curvulis, fulvo-fuscis, 7-septatis, raro 6-5-septatis, ad apicem aliquantulum attenuatis et pallidioribus, 48-52 \approx 11-12.

Hab. in putamine *Persicæ vulgaris*, Cattajo prope Battaglia, in Euganeis Ital. boreal. — Accedit ad *Trematosphæriam callispermam*, a qua differt præcipue longitudine ascorum et sporidiorum, et peritheciis vix subimmersis.

2. *Trematosphæria Virginis* Rehm, *Ann. Mycol.* V (1907) p. 540. — 4176

Peritheciis in ligno decorticato late denigrato subgregariis, globoso-conoides, lata basi sessilibus, plerumque papillulatis, poro minutissimo pertusis, atris, glabris, carbonaceis, 0,7-1 mm. diam.; ascis

cylindræis, apice rotundatis, $150 \approx 15-17$, octosporis; sporidiis ellipsoideis, subobtusis, rectis, hyalinis, demum dilute flavidulis, 3-septatis (an demum 5-septatis?) $21-25 \approx 8-9$, monostichis; paraphysibus filiformibus, hyalinis.

Hab. ad caules siccos Dryadis octopetalæ, juxta glaciem Eiger Virginis Helvetiæ (Dr. REHM). — Peritheciis amplis facile dignoscenda; a *T. Henriquesiano* sporidiis minoribus recedit.

3. *Trematosphæria hypoxylodes* Rehm, Ann. Mycol. V (1907) p. 540. 4177

Peritheciis gregariis interdum 2-3 arcte consociatis, globulosis, sessilibus, parte dimidia inferiore cortici immersa, superiore hemisphærica in papillulam brevissimam, poro conspicuo pertusam elongata, nigris, nitentibus, glabris, 1-1,5 mm. diam., carbonaceis; ascis cylindræo-clavatis, apice rotundatis, $150-180 \approx 12-15$, octosporis; sporidiis fusiformibus, haud acutis, rectis, 7-septatis, ad septa, imprimis medium, subconstrictis, cellula quarta longe cæteris majore, cellula tertia et quarta guttam oleosam magnam includente, subfuscis, $30-33 \approx 8-10$, distichis; paraphysibus filiformibus.

Hab. ad corticem Tiliæ in Lusatia sup. (FEURICH).

4. *Trematosphæria Palaquii* Ricker, A List Philipp. Fungi, in Philipp. 4178

Journ. of Science, I Suppl., (IV 1906) p. 281. — Peritheciis gregariis v. sparsis, leniter immersis, subcarbonaceis, nigris, ovato-globosis, 1-2 mm. diam., ostiolo plerumque obtuse conoideo, mox deciduo; paraphysibus filiformibus, numerosis,asco longioribus; ascis clavatis v. cylindræis, 5-sporis, $132-141 \approx 14-15$; sporidiis monostichis, ovato-oblongis primum hyalinis dein brunnescentibus, 3-septatis, non constrictis, $17-20 \approx 8-12$.

Hab. in cortice Palaquii latifolii, Luzon Prov. Parlac in ins. Philippin. (MERRILL).

5. *Trematosphæria Erythrææ* P. Henn., Hedwigia XLVII (1908) 4179

p. 268 (nec *T. Erythrincæ* P. Henn. l. c. pro errore). — Peritheciis sparsis v. subgregariis, innato-superficialibus, atro-subcarbonaceis, subhemisphæricis, ostiolatis, centro depressis, c. 300 μ . diam.; ascis clavatis, obtusis, 8-sporis, $60-70 \approx 8-10$, paraphysibus filiformibus c. 2 μ . crassis; sporidiis subdistichis oblongo-fusoideis utrinque subacutis, 6-7-septatis, fusco-brunneis, $26-32 \approx 3\frac{1}{2}-4$.

Hab. in pedunculis Erythrææ ramosissimæ, Rio de Janeiro, Serra do Itatiaia, Brasilia.

6. *Trematosphæria socialis* Kirschst., Verh. Bot. Ver. Brandenb. 4180

XLVIII (1906) p. 53. — Peritheciis gregariis in ligno nigrefacto

immersis, ostiolo acuto brevi prominentibus, compactis, nigris, majusculis; ascis elongato-clavatis in pedicellum elongatis, 150-180 \times 12-16, octosporis; sporidiis recte polystichis, obscure brunneis, 4-6-locularibus, parum constrictis, cellula terminali pallidiori, anguste subfusoides, 34-45 \times 6-8; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in ligno Alni putrescente, Semlin prope Rathenow, Germaniæ.

7. *Trematosphæria tripartita* Kirschst., Verh. Bot. Ver. Brandenb. 4181 XLVIII (1906) p. 53. — Peritheciis sparse gregariis in ligno nidulantibus, ostiolo brevi crasso prominentibus, minutis, tenui-membraneis; excipulo brunneo, parenchymatico; ascis clavatis v. subcylindraceis, supra rotundatis, crasse tunicatis, sessilibus vel brevissime crasseque pedicellatis, octosporis, 60-70 \times 10-12; sporidiis oblique v. recte distichis, cylindraceis, utrinque rotundatis, rectis, trilocularibus, primum flavis dein pulchre castaneo-brunneis, ad septa constrictulis, 14-18 \times 4-6; paraphysibus crassiusculis, filiformibus, conglutinatis.

Hab. in ligno salicino decorticato, Gross-Behnitzer See Germaniæ.

8. *Trematosphæria pallidispora* Kirschst., Verh. Bot. Ver. Brandenb. 4182 XLVIII (1906) p. 53. — Peritheciis sparse gregariis, immersis, dein plus minusve prominentibus, parvis, coriaceis, breviter crasseque papillatis, nigris, lignum rubro colorantibus; ascis anguste clavatis, supra rotundatis, breviter pedicellatis, octosporis, 120-150 \times 15-18; sporidiis irregulariter pluriseriatis, hyalinis, maturis flavidis, fusoides, utrinque rotundatis, rectis v. curvulis, 10-locularibus, ad septa fortiter constrictis, loculis uni-v. pluriguttulatis, 30-40 \times 6-7; paraphysibus numerosis, filiformibus, septatis, hyalinis.

Hab. in ramis salicinis decorticatis putrescentibus, prope Rathenow Germaniæ.

9. *Trematosphæria bambusicola* Rick, Broteria V (1906) p. 47. — 4183 — Peritheciis primitus immersis, cute nigrefacta, dein ad dimidiam partem prorumpentibus, scissura longitudinali $\frac{3}{4}$ mm. diam., atris, ostiolo brevi, obtuso; ascis 100-130 \times 5-6, pedicellatis, sporidiis fusiformibus 3-4-locularibus, subhyalinis, in septis valde constrictis, 20 \times 4-5, subcurvulis; paraphysibus filiformibus, ascum longe superantibus.

Hab. in culmis siccis Bambusæ, Rio Grande do Sul Brasiliæ.

10. *Trematosphæria ephemera* Rehm apud Hazsl. Sphær. Hung. 4184

(1893) p. 69, t. IV f. 15. — Peritheciis superficialibus, gregariis hemisphærico-conoideis, ostiolo longiusculo, nigris; ascis clavatis apice rotundatis, brevissime stipitatis octosporis; sporidiis irregulariter distichis, 3-septatis, non constrictis oblongo-fusoideis, utrinque acutiusculis, hyalinis, 26-28 \times 7, rectis.

Hab. in culmis emortuis Zeæ Maydis in Hungaria (LOJKA).
— Vix hujus generis.

TREMATOSPHERELLA Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 54. (Etym. a *Trematosphæria*, cujus est analogia). — Perithecia innato-erumpentia, parva, nigra, coriaceo-membranacea, breviter ostiolata. Asci late clavati, fere ovoidei, octospori, apophysati. Sporidia fusioidea, plurilocularia, colorata. — A *Trematosphæria*, cui affinis differt peritheciis submembranaceis, paraphysibus nullis.

1. *Trematosphærella fuscispora* Kirschst. l. c. p. 54, cum icon. — 4185
Peritheciis gregariis ligno innatis, nigris, coriaccellis, basi hyphis brunneis paucis ornatis, subglobosis, 200-300 μ . diam., ostiolo prominentibus v. superficialibus; ascis late clavatis, vix pedicellatis, supra rotundatis, octosporis, 40-56 \times 12-16; sporidiis irregulariter fusioideis, utrinque rotundatis, irregulariter dispositis, griseo-brunneis, quadrilocularibus, loculo secundo plerumque crassiori, 14-20 \times 4-5.

Hab. in ligno pineo putri in silvis prope Rathenow Brandenb. Germaniæ.

TRICHOHLERIA Sacc., Ann. Mycol. VI (1908) p. 559. (Etym. *thrix* trichos pilus et *Ohleria*, h. e. *Ohleria* pilosa). — Perithecia superficialia, globoso-conoidea, membranaceo-molliuscula, pilis v. setis vestita, nigricantia, ostiolo prædita. Asci elongati, paraphysati, octospori. Sporidia oblonga, v. fusioidea, 3-septata, colorata, mox medio secedentia et semisporas 16 biloculares formantia. — Ab *Ohleria* recedit tantum villo et mollitie perithecorum.

1. *Trichohleria quadrigellensis* Flag. et Sacc. in Sacc. Ann. Myc. VI 4186
(1908) pag. 559, tab. XXIV, f. 2. — Peritheciis laxè gregariis, globosis v. globoso-conoideis obtuse papillatis, 300 μ . diam., nigris, ubique pilosis; contextu celluloso, dilute olivaceo-fuligineo, ex cellulis globoso-angulosis 10-12 μ . diam. formato, molliusculo; pilis peritheci densiusculis, filiformibus, tortuosis, fuliginèis septatis, 80-100 \times 3-4; ascis tereti-clavatis, filiformi-paraphysatis, apice ob-

tusulis, sensim longe tenuato-stipitatis, 70-80 \times 5,5-6,5, octosporis; sporidiis fusoides, distichis, rectiusculis, 20 \times 3, mox in articulos (16) conoideos biloculares dilabentibus, olivaceo-fuscis.

Hab. in ramis fagineis decorticatis putrescentibus, Rigny sur Arroux, Gallia (FLAGEOLET). — Ob contextum molliusculum ad Hypocreaceas vergit. «Quadrigellensis» dicimus ex Quadrigellis h. e. Charolles, territorium in quo reperta est species.

CARYOSPORA De Not. — Syll. II p. 122, IX p. 815, XI p. 329.

1. *Caryospora cariosa* Fairman, The Pyren. of Orleans County in 4187
Proceed. Rochest. Acad. (1905) p. 190 cum fig. 1-6. — Peritheciis majusculis, conicis, nigris, superficialibus v. basi ligno leniter immersis, sparsis vel gregariis; ostioliis parvis; ascis 4-8-sporis, oblongo-cylindraceis, p. sp. 150 \times 20, paraphysisibus filiformibus numerosis obsitis; sporidiis recte monostichis, primum hyalinis dein brunneis demumque fere opacis, uniseptatis, raro versus apicem etiam septatis ideoque 3-septatis, granuloso-guttulatis, septo medio constrictis, e fusoides biconoideis, apice subobtusis, 36-43 \times 13-17.

Hab. in ligno fagineo carioso, Lyndonville N. Y. Amer. bor.

CHÆTOSPHÆRIA Tul. — Syll. II p. 92, IX p. 799, XI p. 326, XIV p. 572, XVI p. 521, XVII p. 736.

1. *Chætosphæria ludens* Morg., Journ. of Myc. XI (1905) p. 105. — 4188
Peritheciis globosis simpliciter pertusis c. 0,4-0,5 mm. diam., setulis longis, 150-200 μ ., pallide brunneis vestitis, gregariis, crusta tenui brunnea v. nigra insidentibus, subfibrillosis; ascis tetrasporis paraphysatis, longe pedicellatis, 130-150 \times 8-9; sporidiis ellipsoideo-oblongis, leniter inæquilateralibus, utrinque obtusis, primum hyalinis et simplicibus dein brunneis et 1-3-septatis, 17-20 \times 7-8.

Hab. in ligno vetusto Aceris sp. in America bor. — A *Ch. pannicola* (B. et C.) ascis et sporidiis distincta.

2. *Chætosphæria caestina* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4189
CXVIII, Abt. I (1908) p. 324, cum icon. — Subiculo parce evoluta; hyphis erectis, diaphane brunneis, septatis, rigidulis, 130-160 \times 5-6, apice in capitula 8-10 μ . diam. inflatis, basi bulbosis 12-20 μ . diam.; inspersis conidiis 6-cellularibus, brunneis, cellulis extimis obtusis, minutis, hyalinis, 40-48 \times 8-12, non constrictis; peritheciis pro more binatis, ovoideo-globosis, non collabescentibus, 340-360 μ . diam., 380 μ . alt., carbonaceis, fragilibus, crasse papillatis, vertice calvis, ceterum setulis laxis, rigidis, sæpe sursum cur-

vis septatis, 140-180 \times 5-6, prope medium apiceque elliptico-inflatis; ascis clavatis, paraphysibus diffluentibus obvallatis, octosporis, 170-210 \times 16-18; sporidiis subdistichis tereti-fusoideis, curvulis, utrinque obtuse rotundatis, 6-cellularibus, 36-44 \times 7-8, non constrictis, brunneis, cellulis extimis minoribus hyalinis.

Hab. in ligno indurato arboris ignotæ in horto bot. Buitenzorg ins. Java. — Conidia verisimiliter cum statu ascophoro metagenetice connexa.

3. *Chaetosphaeria elegans* Rick, Broteria V (1906) p. 45. — Peritheciis subglobosis $\frac{3}{4}$ mm. diam., gregariis, atris, subiculo carbonaceo, brunneo, multiramoso-stellato insidentibus, pilis rigidis, atris, longis, a subiculo distinctis, usque ad ostiola obtectis, collabescentibus; ascis clavatis 100 \times 10, apice incrassato, breviter pedicellatis; sporidiis cylindraceis, 10-14 \times 5-6, 3-septatis, septo crasso, vix coarctato, cellulis ultimis hyalinis, ceteris brunneis, omnibus grosse guttulatis; paraphysibus dilutioribus.

Hab. in ligno putrido, Rio Grande do Sul Brasiliæ. — *Acanthostigmati* proxima sed sporidia et subiculum *Chaetosphaeriæ*.

SPORORMIA De Not. — Syll. II p. 123, IX p. 816, XI p. 329, XIV p. 577, XIV p. 526, XVII p. 737.

1. *Sporormia lata* Griffiths, Mem. Torr. Bot. Cl. XI (1901) p. 110, t. XVI, f. 10-12. — Peritheciis sparsis, hyphis rhizoideis arcte adnatis, e subgloboso ovatis 600 \times 375; e membranaceo coriaceis, nigris et opacis, apice subrostellatis; ascis octosporis, cylindraceis, supra rotundatis infra in stipitem brevem crassiusculum angustatis, 260-320 \times 30-35; paraphysibus filiformibus, septatis, copiose ramosis ascos subsuperantibus; sporidiis monostichis, ex ovoideo late cylindraceis, utrinque rotundatis, 45-48 \times 16-18, quadricellularibus, profunde constrictis sed non secedentibus, brunneis, strato mucoso lato in aqua diffuente obductis.

Hab. in stercore Cuniculorum, Decorah Iowa Amer. bor.

2. *Sporormia vexans* Auersw. — Syll. II, p. 129 — var. *australis* Starb., Ascom. Schwed. Chaco-Cordill. Exp. Arkiv f. Botan. V (1905) p. 16. — A typo satis dignoscitur: ascis 127-150 \times 19-20; sporidiis 45-47 \times 9-10, loculo terminali superiore fere sphærioideo, minute mucronatulo, 7,5 μ . diam., terminali inferiore conico, 10 \times 6; tertio superiore latiore 7,5 \times 10.

Hab. in fimo, prov. Jujuy, Moreno Argentinae, 3500 m. s. m.

3. *Sporormia leguminosa* Fairm., Proc. Rochest. Acad. of Sc. IV 4198

(1906) p. 216, tab. XXI, fig. 1-5. — Peritheciis gregariis, pustulato-prominentibus, apice ostiolo subacuto v. subcompresso apertis; ascis clavato-cylindraceis, paraphysibus filiformibus numerosis obvallatis, $140-150 \times 15-16$; sporidiis brunneis juvenilibus maculis longitudinalibus coloratis demum omnino opacis, quadrilocularibus, irregulariter distichis, rectis v. curvulis, strato mucoso circumdati, $43-47 \times 10$, loculis terminalibus 13μ . long. mediis 10μ . long.

Hab. in superficie interna leguminum Robiniæ Pseudacaciæ, Lyndonville N. Y. Amer. bor.

GIBBERIDEA Fuck. — Syll. II p. 132, IX p. 820, XVI p. 1136, XVII p. 739.

1. *Gibberidea Bresadolæ* Rick, Fungi austro-amer. V, n. VI, Ann. 4194 Myc. V (1907) p. 31. — Peritheciis in maculis folii solitariis v. parce congregatis, atris, rugulosis, 1-2 mm. latis; ascis clavatis $100-150 \times 10-14$; sporidiis fusoides plerumque utrinque appendiculatis, $30-70 \times 7-10$, quadrilocularibus, fuscidulis, nucleatis, pluri-serialibus; paraphysibus linearibus sæpe dilutioribus.

Hab. in foliis Cupaniæ sp. in Brasilia Amer. austr.

2. *Gibberidea adescmicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4195 (1909) p. 365. — Peritheciis dense constipatis per corticis fissuras protrudentibus, subglobosis, $160-250 \mu$. diam., obsolete umbilicatis nitidulis; ascis cylindraceis brevissime cuneato-pedicellatis, $100-200 \times 12-18$, dense paraphysatis, octosporis; sporidiis subellipsoideis v. obsoletissime subclavulatis $22-26 \times 9-11$, 3-septatis, ad septum medium constrictulis, fumosis.

Hab. ad ramos emortuos Adesmiarum specierum plurimarum lignosarum, Cacheuta, Uspallata et Puente del Juca, prope Mendoza, Argentina Amer. austr.

3. *Gibberidea turfosa* Syd, Mycoth. germ. fasc. XIV-XV n. 690 (1908), 4196 et in Ann. Mycol. VI (1908) pag. 479. — Peritheciis plerumque cæspitosis 2-5 dense congestis, raro tantum solitariis, primo peridermio tectis, dein erumpentibus, tandem subsuperficialibus, stromate non vel vix evoluto, globosis, carbonaceis, atris, ostiolo minuto papilliformi, $300-450 \mu$. diam.; ascis longe cylindraceis, apice obtusis, breviter stipitatis, $85-115 \times 7-9$, octosporis; paraphysibus numerosis, filiformibus, ascos superantibus; sporidiis monostichis, ovato-oblongis, utrinque obtusis, 3-septatis, ad septa lenissime constrictis, olivaceo-brunneis, $14-18 \times 4\frac{1}{2}-7$.

Hab. in ramis emortuis Vaccinii uliginosi, Rotes Moor

pr. Gersfeld Rhöngebirge Thuringiæ. — *Melanomma Lenarsii* in Calluna, convenit sporidiis 12-17 \approx 3,5-5, sed ejus perithecia *Melanommatis* genuini.

4. *Gibberideæ Artemisiæ* Earle, Bull. of the New York Bot. Gard. 4197 (1904) p. 291. — Stromatibus brunneis angustis; peritheciis gregariis, 2-3 v. 6-8 in quoque stromate v. quandoque sparsis, subglobosis, demum leniter depressis, obscure fuscis, subnigris, nitidulis, circ. 500 μ . diam., ostiolo minute papillato; ascis cylindræis 100-120 \approx 8-10; paraphysibus filiformibus; sporidiis subdistichis, cylindræis, coloratis v. pallide fuliginæis, 3-septatis, constrictis, curvis, 20-25 \approx 7.

Hab. in caulibus *Artemisiæ tridentatæ*, King's Canon prope Carson Nevada Amer. bor. (C. F. BAKER).

5. *Gibberideæ alnicola* Rehm, Ann. Mycol. V (1907) p. 540. — Peritheciis sub cortice nidulantibus 4-12 arcte congregatis per rimas longitudinales corticis prorumpentibus demum fere sessilibus, globosis, minute papillulatis glabris, atris, poro conspicuo pertusis contextu parenchymatico, 0,3-0,4 mm. diam.; ascis cylindræis, 90-100 \approx 8-9, octosporis; sporidiis subclavulatis, utrinque obtusis, rectis, 3-septatis, vix ad septa constrictis, cinereo-flavidulis, 12-15 \approx 4,5-5 monostichis, paraphysibus filiformibus 1 μ . crassis.

Hab. ad ramulum *Alni viridis*, Fürstenalp, Graubünden, Helvetia. (Dr. VOLKART).

7. *Gibberideæ Zingiberacearum* Raciborski, Bull. Ac. Sc. Cracoviæ 4199 (1909) p. 385. — Stromatibus subepidermicis parvis, extus nigro-carbonaceis intus albis, irregulariter rotundatis; peritheciis globoso-ovoideis, quandoque forma irregularibus, levibus, nigris, ostiolo punctiformi epapillato præditis, primum stromate immersis, demum pro parte prominentibus, 110-130 μ . latis, 110-170 μ . long.; paraphysibus 2 μ . cr., septatis, hyalinis, cylindræis; ascis breviter clavatis 75-80 \approx 8-10, octosporis, apice rotundatis, basim versus angustatis; sporidiis fusoideis, primum bi-dein in eodemasco quadrilocularibus, medio constrictulis, utrinque lanciformi angustatis, rectis v. curvulis, levibus, pallide brunneis, 15-18 \approx 3,5.

Hab. initio plerumque parasitice in uredosoris ad folia *Amomi dealbati*, *Zingiberis* sp., *Alpinæ*, *Curcumæ longæ*, prope Buitenzorg Java.

8. *Gibberideæ Nipæ* P. Henn., Hedwigia XLVII (1908) p. 257. — 4200 Peritheciis superficialibus, liberis cæspitosis in stromate atro-crustaceo effuso dispositis, atro-carbonaceis, ovoideis, conico-ostiolatis

dein perforatis; ascis clavatis, vertice obtuso-rotundatis, 8-sporis, $90-110 \times 20$; sporidiis subdistichis, oblonge fusoides, utrinque obtusiusculis, 4-5-septatis, brunneis, $40-48 \times 8-10$.

Hab. in petiolis emortuis *Nipæ fruticantis*, Luzon, Prov. Pampanga, San Esteban, Ins. Philippin (MERRILL).

GILLOTIA Sacc. et Trott. (Etym. a cl. Doct. F. X. GILLOT, gallico, [1842-1910] mycologo et botanico egregio, præcipue de fungis superioribus apprime merito). — A genere *Diplothea* dignoscitur sporidiis tantum transverse 3-septatis nec muriformibus, demum olivaceo-brunneis et mucis, ut videtur, non inclusis.

1. *Gillotia orbicularis* (Syd.) Sacc. et Trott., *Diplothea? orbicularis* 4201 Syd., Ann. Mycol. V (1907) p. 357. — Peritheciis in greges plerumque orbiculares 3-10 mm. diam. dense confertis et plagulas atras efformantibus, atris, erumpentibus, superficialibus, subglobosis, rugulosis, ca $100-125 \mu$. diam.; ascis saccatis vel subclavatis membrana valde incrassata, aparaphysatis, $60-85 \times 20-30$ brevissime stipitatis, octosporis; sporidiis conglobatis, oblongis, 3-septatis, rectis vel leniter curvulis, primo hyalinis, tandem olivaceo-brunneis, $28-38 \times 8-11$.

Hab. in cortice *Cactaceæ*, Campinas Prov. Sao Paulo Brasilæ.

Sect. 8. Hyalodictyæ.

PLEOSPHERULINA Pass. — Syll. XI p. 350, XIV p. 611, XVI p. 554, XVII p. 743.

1. *Pleosphærulina Briosiana* Pollacci - Syll. XVI p. 554 - var. *brasiliensis* Puttem. in Revista Agricola S. Paulo (1905) p. 17-20, fig. 13-15 extr. — Peritheciis innatis vix erumpentibus, ostiolo latiusculo obtuso præditis, $120-150 \mu$. diam.; ascis paucis ellipsoideis, sessilibus, utrinque obtusis, $80-90 \times 30-38$, octosporis, aparaphysatis; sporidiis subdistichis, ovato-oblongis utrinque obtusulis, triseptato-muriformibus, ad septa leviter constrictis, $25-30 \times 10-12$, e hyalino chlorinis.

Hab. in foliis *Medicaginis sativæ*, quam vexat, S. Paulo Brasilæ.

2. *Pleosphærulina argentinensis* Speg. An. Mus. Nac. Buenos Aires 4203 t. XIX (1909) p. 387. — Maculis albescentibus orbicularibus vel

biformibus disseminatis; peritheciis amphigenis solitariis vel laxe gregariis innatis coriacellis, e lenticulari subglobosis 100-120 μ . diam., ostiolo majusculo impresso perforatis; ascis ovoideis sessilibus 80-90 \times 40-45, octosporis, apapophysatis; sporidiis subellipsoideis 3-5-septato-muriformibus, ad septa leniter ad medium validius constrictis, 30-35 \times 12-16, hyalinis.

Hab. ad folia languida *Daturæ Stramonii*, Marmol prope Buenos Aires Rep. Argentina Amer. austr. — *Catharinice americanæ* (Ell. et Ev.) Sacc. Syll. XI p. 350 affinis, notis plurimis tamen distincta.

3. *Pleosphærulina smilacicola* Speg., An. Mus. Nac. Buenos Aires 4204 t. XIX (1909) p. 387. — Maculis sæpius marginalibus amphigenis e cinerescente albido-arescentibus determinatis, areola angusta sordide subpurpurascente cinctis; peritheciis subsolitariis erumpenti-subsurfacealibus, sublenticularibus 100-150 μ . diam., atris, glabris, ostiolo minuto impresso pertusis; ascis subpiriformibus 70 \times 50, basi perminute papillato-pedicellatis, octosporis, apapophysatis; sporidiis ellipsoideo-oblanccelatis 5-septato-muriformibus, 35-40 \times 10-14, tunica mucosa crassa concolore vestitis, hyalinis.

Hab. ad folia languida *Smilacis campestris* in dumetis prope Jujuy Argentina, Amer. austr.

4. *Pleosphærulina Oryzæ* I. Miyake Pilze Reispfl. Japan (Journ. Col. lege Agricult. Tokyo II (1910) pag. 250, t. XIII, f. 23-25. — Peritheciis immersis, globosis v. ellipsoideis, nigris, crasse pseudoparenchymaticis 100-125 μ . diam.; ascis obvoideis, octosporis, 50-60 \times 30-35; sporidiis hyalinis transverse 4-5-septatis et 1-2 septis longitudinalis præditis, 25-32 \times 9-12.

Hab. in foliis albescentibus *Oryzæ sativæ*, Ehime, Japonia.

5. *Pleosphærulina Phragmitis* Rehm, Ann. Mycol. V (1907) p. 542 4206 — Peritheciis gregariis innatis globosis papilla minutissima prominente, atris, contextu membranaceo fusco, 0,3 mm. diam., demum plus minusve denudatis, sessilibus; ascis crasse tunicatis, clavatis vel piriformiter versus basim dilatatis, sessilibus, 150 \times 50-70, octosporis; sporidiis ovoideo-ellipsoideis, utrinque obtusis, primitus 3-, dein transverse 5-septatis, cellulis excl. terminalibus, semel longitudinaliter divisus, medio subangustatis, hyalinis, quæ cellula grosse 1-guttata, 40-45 \times 20, distichis; paraphysibus rarissimis, septatis, 5 μ . crassis, hyalinis.

Hab. ad culmos putridos *Phragmitis communis* in lacu Staffelsee prope Murnau alpium Baviaræ (Rehm).

CATHARINIA Sacc. — Syll. II p. 275, IX p. 892, XI p. 350, XIV p. 611, XVI p. 554, XVII p. 743.

1. *Catharinia chilensis* Speg., Fungi Chilenses (1910) p. 84 cum ic. 4207
— Peritheciis sparsis subglobosis parvis ligno denudato plus minusve insculptis, subcarbonaceis, 250-400 μ . diam.; ascis clavulatis, deorsum modice tenuiterque attenuato-pedicellatis, paraphysatis, 160-180 \times 18-20; sporidiis submonostichis ellipsoideis sæpius leniter subnavicularibus, transverse 3-5-, longitudinaliter 1-septatis. parvis, hyalinis, 16-20 \times 7-9.

Hab. in ramis siccis corrosis *Lithrææ causticæ* Cerro Alegre de Valparaiso Chile Amer. austr.

2. *Catharinia tetraspora* v. Höhn. Fragm. Mykol. IX, in Sitzb. k. Ak. 4208 d. Wiss. Wien CXVIII (1909) Abt. I, pag. 1505. — Peritheciis carbonaceo-fragilibus, gregariis, contextu crassiusculo præditis, e globoso ventricosconoideis, glabris, levibus, 300 μ . circa latis, epidermide tectis dein erumpenti-superficialibus; paraphysibus numerosis, filiformibus, ramosis, 1 μ . cr., fortiter mucosis; ascis tenuiter tunicatis, clavatis, supra rotundatis, basi sensim in pedicellum modice longum crassum angustatis, plerumque tetrasporis, 80-120 \times 14-17; sporidiis plerumque monostichis, raro distichis et tunc ascis brevioribus et crassioribus, hyalinis, 3-6-plerumque 5-septatis et interrupte longitudinaliter 1-septatis, ad septa non constrictis, subfusoides, 21-32 \times 7-12, plerumque 24-28 \times 10-12, tenuiter tunicatis.

Hab. ad culmos emortuos *Bambusæ*, in Horto bot. Buitenzorg in ins. Java.

3. *Catharinia Rostrupii* Berl. Icon. Fung. II, p. 100, t. 135, f. 2. — 4209
Peritheciis sparsis, globosis, ostiolo crassiusculo donatis, tectis, dein utramque folii paginam inflantibus, $\frac{1}{2}$ mm. diam., atris; ascis 140-160 \times 35-42; sporidiis oblongo-ovoideis, utrinque obtusulis, subinde inæquilateris, transverse triseptatis, 40-45 \times 16, hyalinis, mucobovolutis, transverse 3-septatis, loculis mediis 1-2 septis longitudinaliter divis.

Hab. in foliis *Poæ* in Groenlandia (ROSTRUP in herb., sub *Metasphaeria neglecta* [non Niessl]).

4. *Catharinia Pazschkeana* Rehm, Ann. Mycol. V (1907) p. 528. — 4210
Peritheciis in maculis hypophyllis irregularibus, cinereo-viridulis, interdum albidulis, ex epidermide folii decolorata formatis, 0,5-1,5 cm. diam. dispersis, interdum gregariis, sub epidermide nidulantibus ab eaque obtectis, globulosis, papillula minutissima promi-

nente, demum denudatis, atris, poro pertusis, subcarbonaceis, 400-500 μ . diam., senilibus scabris, fere sessilibus; ascis clavatis, crasse tunicatis, 100-110 \times 30-35, octosporis; sporidiis fusiformibus, transverse 2-4-8-, demum 15-septatis, perpendiculariter plerumque 3-4-septatis itaque muriformibus, hyalinis, interdum medio subconstrictis, 40-42 \times 12-14, di-tristichis; paraphysibus ramosis, 1 μ . latis, septatis, hyalinis.

Hab. in foliis *Adianti curvati*, Sao Francisco Brasiliæ (ULE, comm. doct. PAZSCHKE). — Sporidiis majusculis, crebro multi-septatis dignoscenda species.

BOERLAGELLA Penz. et Sacc. — Syll. XIV p. 612.

1. *Boerlagella argentinensis* Spegazz., An. Mus. Nac. Buenos Aires 4211 t. XIX (1909) p. 388. — Maculis nullis; peritheciis solitariis superficialibus subglobosis 250-300 μ . diam., circa ostiolum impressum eximie densiusculeque setuloso-penicillatis, pilis erectis rigidulis apice obtusiusculis, 100-180 \times 6-8, 3-septatis fuliginis pellucidis; ascis subcylindraceis breviter pedicellatis, paraphysatis, octosporis, 200-230 \times 30-40; sporidiis ellipsoideis v. obsolete subovoideis transverse 3- verticaliter 1-septatis, ad septa transversa constrictulis 40-55 \times 18-22, diu hyalinis postremo pallide subchlorinis v. fumosis, mucosæ semper destitutis.

Hab. ad culmos aridos subputrescentes *Secalis cerealis*, La Plata Rep. Argentina. Amer. austr.

WINTERIA Rehm. — Syll. II p. 225 ex p., IX p. 870 (*Winterina* ex p.), XIV p. 612, XVI p. 554.

Teste cl. Höhnelt, Fragm. Myk. VIII (1909) p. 50-57 species huius generis heteroclyti pleræque emendandæ sunt. Nempe:

- W. excellens* Rehm, ipso auctore Rehmio consentiente, est *Odontotrema hemisphaericum* (Fr.).
- W. lichenoides* Rehm, *W. viridis* Rehm et *W. cembricola* Rehm, sunt, teste v. Höhnelt, lichenes *Microglanæ* Körb. peraffines.
- W. ordinata* (Fr.) Sacc. esset = *Zignoella dolichospora* Sacc.
- W. tuberculifera* E. et Ev. = *Winterina tuberculifera* (E. et Ev.) Sacc. Syll. XIV p. 589.
- W. Zahlbruckneri* Bäuml. Est forte *Odontotrematis* species.
- W. culmigena* Karst. et Maubl. = *Gibberella Saubinetii* (Mont.) Sacc.
- W. aterrima* Hazsl., teste v. Höhnelt. est omnino dubia.
- W. rhoina* Ell. et Ev. et *W. crustosa* Ell. et Ev. propius accedunt ad gen. *Leptospora* Penz. et Sacc.

W. lobata Fr. et Earl., opinante v. Höhn. potius Discomycetem quemdam sistit. *W. oxyspora* Penz. et Sacc., opinante eodem v. Höhn. melius diceretur *Bertia* (Rehmiomyces) *oxyspora* (P. et S.) v. Höhn. sed certe a typo *Bertiæ* omnino abhorret, hinc rectius sect. Rehmiomyces in genus proprium erigenda et tunc *R. oxysporus* dicendus.

1. *Winteria subcærulescens* (Nyl.) Rehm Ascom. n. 1242 (1898), *Ver.* 4212
rucaria subcærulescens Nyl. Flora 1872, p. 326 - Teste Rehm l. c. huc spectant: *W. cærulea* Ell. et Ev. - Syll. IX, pag. 910. — *Polyblastia acuminans* Nyl., Labouan (1891) p. 45, et teste prof. v. Höhn (Fragm. VIII, p. 55) synonyma sunt quoque *W. larin-cina* v. Höhn. (1909) et *W. intermedia* Sacc. et Fautr. Verisimiliter sunt potius varietates v. formæ. Prof. v. Höhn pro hac specie a Lichenibus certe distincta, nomen novum *Mycoglæna* proponit sed prorsus inutiliter cum servari debeat *Winteria* Rehm emend.

JULELLA H. Fabre — Syll. II p. 289, IX p. 899, XVI p. 217.

1. *Julella Zenkeriana* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 127. 4213

— Peritheciis gregarie sparsis cortice exteriori flavo-brunneo, incrassato innatis, hemisphærico-superficialibus, flavo-brunneis, vertice anulato-discoideis, pallidis, ostiolo papillato atro prominulis, c. 1-1,5 mm. diam.; ascis late clavatis, crasse tunicatis, stipitatis, apice rotundato-obtusis, 2-4-sporis, 280-350 × 60-70, paraphysibus filiformibus, ramosissimis, hyalinis, c. 2 µ. cr.; sporidiis conglobatis cylindræis, utrinque rotundatis, longitudinaliter et transverse pluriseptatis, clathroideis, hyalino-flavidulis, 140-220 × 30-40.

Hab. in ramis corticatis, Bipindi Kamerun Africæ centr. (ZENKER). — *J. dactylosporæ* Rehm affinis, sed differt ascis stipitatis, sporidiis pallidioribus etc.

2. *Julella leopoldina* Rehm, Ann. Mycol. VI (1908) p. 319. — Peri- 4214

theiciis gregariis cortice innatis, epidermide arcte adnatis, plus minusve versus apicem denigratis, velatis, globosis ca. 1 mm. diam., ostiolo non papillato, perspicuo, poro pertuso, atris, excipulo fusco, subcarbonaceo; ascis clavatis, apice rotundatis, ca. 200 × 50, octosporis; sporidiis fusiformi-ellipsoideis, utrinque subacutatis, transverse 9-11(-13)-septatis, longitudinaliter 2-4-septatis, quaque cellula 1-guttata, flavidulis, dein brunneis, 70-85 × 20-25, senilibus atropurpureis, plicato-corrugatis, tristichis; paraphysibus septatis, 1 µ. crassis, subramosis, hyalinis, muco hyalino coalitis, iodi ope rubro-vinoso-tinctis.

Syll. fung. XXII (VI-1912)

Hab. ad ramos, Sao Leopoldo, Rio Grande do Sul Brasiliæ
(THEISSEN S. J.) — *Julella argentinæ* subaffinis.

3. *Julella luzonensis* P. Henn., Hedwigia XLVII (1908) p. 257. — 4215
Peritheciis gregariis cortice nidulantibus, simplicibus, globuloso-depressis, atro-carbonaceis, papillatis, vertice poro pallido perforatis, 1-1 1/2 mm. diam.; ascis clavatis 40 µ. c. cr., 2-raro 4-sporis; paraphysibus copiosis, filiformibus, 2 µ. c. cr.; sporidiis monostichis cylindraceis v. fusoideis, utrinque obtuso-rotundatis, 12-16-septatis, clathrato-reticulatis, atro-brunneis, 80-120 × 20-23.

Hab. in cortice arboris indet. Luzon, Prov. Benguet, Ins. Philippin., mart. 1904 (ELMER).

PELTOSPHERIA Berl. — Syll. IX p. 898, XVII p. 744.

1. *Peltosphaeria vitrispora* (C. et H.) Berl. — Syll. IX, p. 898. — 4216
forma *Oleæ* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 624. — A typo præcipue differt matrice et sporidiis distichis (ascis 100-120 × 22-25).

Hab. in ramulis *Oleæ* europææ, in ins. Corcyra [Corfû] (EGGERTH)

TEICHOSPORELLA Sacc. — Syll. II p. 303, IX p. 908, XI p. 351, XVII p. 744.

1. *Teichospora callimorpha* Syd., Deutsche Zentral-Afrika Exped. 4217
1907-1908 II Bd. (1901) p. 99. — Peritheciis superficialibus, dense gregariis, globosis, e mutua pressione sæpe irregularibus, 1/2-3/4 mm. diam., obscure brunneis, carbonaceis, ostiolo papilliformi impresso præditis; ascis cylindraceo-clavatis, apice rotundatis, parum incrassatis, p. sp. 140-175 × 20-35, stipite c. 70 µ. longo præditis, octosporis; paraphysibus numerosis, filiformibus; sporidiis distichis, transverse 10-18-septatis, quaque cellula longitudinaliter 2-3 septata, hyalinis, elongato-ellipsoideis, v. subfusiformibus utrinque leniter attenuatis, sed obtusulis, 45-65 × 12-18, haud constrictis.

Hab. in ramulis Leguminosæ cujusdam, Beni Africæ trop.

Sect. 9. Phæodictyæ.

PLEOSPORA Rabenh. — Syll. II p. 241, IX p. 873, XI p. 342, XIV p. 594, XVI p. 544, XVII p. 747.

1. *Pleospora herbarum* (Pers.) Rab. — Syll. II, p. 247. — Var. Co- 4218

ryphæ Cav. et Moll., Atti Ac. Gioenia Sc. Nat. XIX, Mem. II (1906) Extr. p. 29, cum tab. — A typo differt peritheciis globoso-conoideis numquam collabescentibus, ostiolo in collum prælongum, cylindraceum, arcuatum protracto.

Hab. in foliis *Coryphæ australis* quam valde vexat in Horto Botanico Catania, Siciliæ. — Var. *Galii* Lamb. Rev. myc. XIII (1891) p. 1, t. 112, f. 7 (Notæ et ic. biolog.). — In caule *Galii Aparines* in Belgio. — Var. *Cheiranthi* Cocc. et Mor., Funghi di Bologna Cent. II, n. 196, t. un., fig. 4 (*P. Cheiranthi*). — Peritheciis globosis $\frac{1}{2}$ mm. diam.; ascis 145-160 \times 24-30; sporidiis ovato-oblongatis, 33-36 \times 14-16, luteo-brunneis, 7-septatis crebreque muriformibus. — In siliquis *Cheiranthi Cheiri* in Italia bor. — Var. *Liriodendri* Berl., N. Giorn. bot. it. XX (1888) p. 100, t. V, f. 3. — Peritheciis minoribus; ascis clavatis 110-120 \times 20-24; sporidiis elongato-oblongis, 32-36 \times 14-16, luteis, 7-septatis parceque muriformibus. — In foliis emortuis *Liriodendri* in Lusitania (MOLLER). — Var. *Marrubii* Berl. l. c. p. 100, t. V, f. 6. — Peritheciis majusculis 500 μ . diam., papillatis; ascis 110-130 \times 28-30; sporidiis utrinque acutulis, 30-32 \times 10-12, flavis, 7-8-septato-muriformibus. — In caulibus *Marrubii vulgaris* in Italia boreali (PASSERINI). — Var. *Psoraleæ* Berl., l. c. p. 100, t. V, f. 4. — Peritheciis globoso-depressis, obtuse papillatis, 300 μ . diam.; ascis 70-80 \times 22-24; sporidiis 7-septatis parceque muriformibus, 28-30 \times 12-14, luteis. — In caulibus *Psoraleæ bituminosæ* pr. Neapolim (herb. SACCARDO). — Var. *subsulcata* (Ell. et Ev.) Sacc. et Trav. — Syll. XX, p. 439 — *Pl. subsulcata* Ell. et Ev., in Proc. Roch. Acad. (1900) pag. 44, t. IV, f. 1-2; *Pl. herbarum* forma Fairm., l. c. (1905) p. 182. — Sporidiis 6-7-septato-muriformibus, strato hyalino crasso obductis. — In caule *Allii*? New York Amer. bor. — var. *coluteicola* P. Henn., Verh. Bot. Ver. Prov. Brandenb. XLVII (1905) p. XI. — Peritheciis depresso globosis, nigris, 200-260 μ . diam.; ascis oblongo-clavatis 100-160 \times 20-40, octosporis; sporidiis subdistichis, oblongo-clavatis, raro subfusoides, uno v. binis apicibus acutatis, 5-7- raro 8-septato-muriformibus, 25-40 \times 11-18. — In ramulis emortuis *Coluteæ arborescentis* prope Lanke in Brandenburg.

2. *Pleospora Lepidii* Hollós, Ann. Mus. Nat. Hung. V (1907) p. 454. 4219

— Peritheciis dense gregariis, erumpentibus, nigris, glabris, superne depressis, ostiolo breve cylindraceo donatis, 320-380 μ . diam.; ascis cylindraceis, apice rotundatis, breve stipitatis, 2-4-plerumque

4-sporis, 100-120 \times 12-16, filiformi paraphysatis; sporidiis oblique monostichis, fusoides, 5-7-septatis, ad septum medianum constrictis, longitudinaliter 1-3-septatis, flavis 24-30 \times 8-10.

Hab. in caulibus siccis *Lepidii crassifolii* prope Kecs-kémét Hungariæ.

3. *Pleospora minuta* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 4220

(1906) p. 56. — Peritheciis plerumque sparsis, punctiformibus, breviter papillatis, nigris, membranaceis, levibus, subepidermicis dein superficialibus, globosis, demum applanato-collabescentibus; ascis clavatis, brevissime pedicellatis, supra rotundatis, 80 \times 10-12, octosporis; sporidiis supra distichis infra monostichis, fusoides, utrinque rotundatis, quandoque etiam inaequilateris, flavis, demum obscure brunneis, transverse 5-9-septatis et quandoque imperfecte longitudinaliter 1-septatis, ad septa constrictulis, 18-25 \times 6; paraphysibus numerosis, filiformibus, ramosis, hyalinis.

Hab. in caulibus siliquisque *Erysimi repandi* prope Rathenow Germaniæ.

4. *Pleospora tessellata* Ferdinands. et Winge, Botan. Tidsskrift 29 4221

Bd. (1909) p. 319, fig. 8. — Peritheciis per corticem erumpentibus, demum superficialibus, applanatis, depressis vel pezizoideo-collapsis; ambitu circulari v. parum elongato, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam., nigris; ascis maturis ellipsoideo-saccatis, e. pressione sporidiorum hinc inde irregulariter bullatis, parte spor. 120-140 \times 60-75; sporidiis octonis, disticho-conglobatis conglobatisve, ovoides, utrinque truncatis, medio parum constrictis, transverse constanter 7-septatis, septis longitudinalibus, in fronte qualibet sporidii ternis visis regulariter tessellatis, 40-50 \times 21-26, obscure brunneis, demum impellucidis, tunica mucosa persistenti, ad 4 μ . cr. hyalina indutis.

Hab. ad ramulos siccos corticatos *Zygophyllacearum* sp. in Chilé (CUMING).

5. *Pleospora Xanthoceratis* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4222

p. 334. — Peritheciis sparsis, superficialibus, depresso-globosis, nigris, 280-320 μ . diam., contextu parenchymatico; ascis cylindræo-clavatis, breve stipitatis, octosporis, 160-180 \times 24-32; paraphysibus filiformibus, septatis; sporidiis monostichis, vel inordinate distichis, oblongo-ellipsoideis, melleis, 3- dein 7-septatis, muriformibus, medio constrictis, 32-38 \times 16-18.

Hab. in ramulis emortuis *Xanthoceratis sorbifolii* culti, Kecs-kémét Hungariæ.

6. *Pleospora oligasca* Bubák, Bull. Herb. Boiss. 2. sér. VI (1906) 4223

p. 401. — Peritheciis plus v. minus crebre distributis, globosis, supra collo plus minusve elongato auctis, circ. 90 μ . diam., nigris, parietibus crassis donatis, primum subepidermicis dein collo erumpentibus, contextu brunneo-nigro distincte parenchymatico; ascis paucis, late ovoideis, utrinque angustatis, $45 \times 22-24$, crasse tunicatis, supra rotundatis incrassatisque, infra breviter pedicellatis, octosporis; sporidiis elongatis $26-31 \times 8,5-11$, flavidulis, transverse 5-6-septatis, parte superiore 2-3-septata et $8,5-11 \mu$. lata, inferiore 4-septata et $6,5-9 \mu$. tantum lata.

Hab. in inflorescentiis siccis *Helianthemi cani* var. *acutifolii*, M. Gradiste prope Kolasin Montenegro, 2000 m. alt. — A *Pl. Fumanæ* diversa.

7. **Pleospora Silenes** Earle, Bull. of the New York Bot. Gard. (1904) 4224

p. 194. — Peritheciis gregariis in maculis nigricantibus insidentibus, prominentibus, cuticula mox lacerata erumpentibus, nigris, collabescentibus, 200 μ . circ. diam., ostiole minute papillato, inconspicuo; ascis cylindraceis v. anguste ellipsoideis, breviter stipitatis, crasse tunicatis, circ. 140×30 ; paraphysibus filiformibus, angustis; sporidiis distichis, ovoideis v. ellipsoideis, compressis, obscure brunneis, 3-septatis, una v. binis cellulis mediis septo verticali divis, ad septa constrictis, apice obtusis, circ. $30-35 \times 14-18$.

Hab. in caulibus emortuis *Silenes* sp., Clear Creek Cañon prope Carson, Nevada Amer. bor. (C. F. BAKER).

8. **Pleospora Colobanthi** P. Henn., Deutsche Südpolar Exped. Bd. 4225

VIII (1906) Extr. p. 12, tab. II, fig. 10 a-b. — Peritheciis sparsis, innato-suberumpentibus, depresso-globosis, poro pertusis, atro-membranaceis, c. 150-180 μ . diam.; ascis clavatis, apice obtuse rotundatis, octosporis, $90-110 \times 20-30$; sporidiis subdistichis v. subtristichis, oblongis, utrinque rotundatis, 6-7-septatis, medio constrictis, muralibus, $25-30 \times 12-15$, melleis dein fusco-brunneis.

Hab. in foliis *Colobanthi kerguelensis*, Kerguelen Vanhöffen-Insel (Dr. VANHÖFFEN).

9. **Pleospora Alsines** Hollós, Ann. Mus. Nat. Hung. IV (1906) p. 332, 4226

tab. VIII, fig. 5. — Peritheciis sparsis, depresso-globosis, nigris, ostiolo brevi cylindraceo, 210-240 μ . diam.; ascis clavatis, breve stipitatis, 8-sporis, $80-100 \times 14-16$; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. inordinate distichis, oblongo-ellipsoideis, melleis, dein castaneo-umbrinis, 3-septatis, ad septa constrictis, loculo uno vel duobus intermediis longitudinaliter divis, $20-28 \times 8-12$.

Hab. in foliis siccis *Alsines vernæ* prope Kecskenét Hungariæ. — *A. Pleosp. nivalis* Niessl diversa.

10. *Pleospora Cerastii* Feltg., Vorst. Pilzfl. Luxemb. Nachtr. IV (1905) 4227 p. 84. — Peritheciis sparsis, omnino tectis, vix papillulatis, globoso-depressis, brunneis, basi hyphis brunneis limitatis, 0,2-0,25 mm. dm., contextu flavo-brunneo grosse parenchymatico; ascis clavatis, breviter crasseque pedicellatis, supra late rotundatis v. subattenuatis, octosporis, 80-108 \times 16-21, paraphysibus filiformibus obsitis; sporidiis distichis, ellipsoideo-fusoideis, obtusis, rectis v. curvulis, 5-septatis, ad septa constrictulis, loculis mediis longitudinaliter uniseptatis, flavis, guttulatis, 22-27 \times 8-9.

Hab. in foliis caulibusque *Cerastii tomentosi*, Mahlberg Luxemburgia.

11. *Pleospora cereicola* Speg., Fungi Chilenses (1910) p. 85. — Peritheciis sparsis ligno denudato plus minusve infossis subglobosis coriaceo-membranaceis, atris opacis, 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis paraphysatis, 120-130 \times 12; sporidiis obovatis fusco-fuligineis parvis, transverse 3-septato-constrictulis septis 1 v. 2 longitudinaliter divis, 14-16 \times 8-9. 4228

Hab. in ligno emortuo *Cerei* Quisco in collibus prope Batuco Chile Amer. austr. — *Pl. Saccardianæ* Berl. affinis.

12. *Pleospora opunticicola* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 4229 p. 401. — Peritheciis in maculis magnis griseo-cinereis sparsis v. gregariis, epidermide diu tectis, dein collo 100-120 μ . lato erumpentibus, globosis, 300-400 μ . latis, nigris, contextu crasso, parenchymatico, infra olivaceo-brunneo supra nigricante; ascis cylindraceis, 90-130 \times 10-11, supra rotundatis basi in pedicellum brevem tenuatis, rectis v. curvis, crasse tunicatis, octosporis, hyalinis, paraphysibus filiformibus numerosis obsitis; sporidiis elongatis, 15,5-18,5 \times 6,5-7,5, triseptatis et septo longitudinali plus minusve evoluto donatis, medio fortiter constrictis, utrinque rotundatis, flavo-brunneis, oblique monostichis v. supra subdistichis.

Hab. in cladodiis vivis *Opuntiae Fici-indicæ* prope Ulcinj Montenegro.

13. *Pleospora trevoicola* Speg., Fungi Chilenses (1910) p. 92, cum 4230 icon. — Peritheciis sparsis v. laxè gregariis, primo cortice tectis, dein denudato-subsurfacealibus, subhemisphæricis non papillatis, atris glabris v. hyphis paucis radiantibus cinctis, membranaceis, 150-180 μ . diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, paraphysatis, octosporis, 100-120 \times 25-30; sporidiis pro-

teiformibus, ellipsoideo-didymis v. subclavulatis, transverse 1,3,5,7-septato-constrictulis, loculis nullis, paucis v. omnibus septis 1 vel 2 longitudinalibus divis, primo flavis dein fuliginis, 25-32 × 10-14.

Hab. in ramulis siccis *Trevoræ trinervis* in collibus San Bernardo prope Santjago Chile Amer. austr.

14. *Pleospora Trevoræ* Speg., Fungi Chilenses (1910) p. 86. — Pe- 4281
 ritheciis primo epidermide tectis, dein subsuperficialibus nudis, laxè gregariis, lenticulari-hemisphæricis, parvis, ostiolo minute papillato ornatis, atris glabris carbonaceis, 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis, densiuscule paraphysatis, 150 × 12; sporidiis oblique monostichis, ellipsoideo-subovatis, mediocribus, fuliginis, transverse 3-septatis, ad septum medium constrictis, loculis centralibus septo altero longitudinali divis, 18-24 × 8-10.

Hab. in ramis siccis *Trevoræ trinervis* in collibus San Bernardo prope Santjago Chile Amer. austr. — *Pl. Saccardianæ* Roum. affinis sed differt ascis et sporidiis majoribus.

15. *Pleospora ligni* Kirschst, Verh. Bot. Ver. Prov. Brandenb. XLVIII 4282
 (1906) p. 57. — Peritheciis in greges dispositis, ligno immersis, ostiolo prominentibus, nigris, membranaceis, 200-300 μ . diam.; ascis cylindræo-clavatis, in pedicellum brevem tenuatis, supra rotundatis, plerumque 200 × 24, quandoque etiam duplo longioribus, octosporis; sporidiis infra mono-supra distichis, fusoidis, pallide dein obscure brunneis, plerumque transverse 9-longitudinaliter 2-septatis, non constrictis, 36-45 × 12-15; paraphysibus hyalinis, filiformibus, septatis, ad septa constrictis.

Hab. in ligno denudato *Rhamni Frangulæ* prope Rathenow Germania.

16. *Pleospora Evonymi* Fuck. — Syll. II, pag. 258 — f. *ramealis* 4283
 Feltg., Vorst. Pilz-Fl. Luxemb. IV (1905) pag. 86. — A typo differt peritheciis non depressis, vix papillatis; ascis sporidiisque majoribus.

Hab. in ramis corticatis *Evonymi europæi*, Luxemburgia.

17. *Pleospora Acænæ* P. Henn., Deutsche Südpolar-Exped. Bd. VIII 4284
 (1906) Extr. p. 11, tab. II, fig. 8 a.b. — Peritheciis sparsis, innato-erumpentibus, subglobosis, atro-membranaceis, subpapillatis, porosis, 150-180 μ .; ascis fusoidæo-clavatis, apice attenuatis, rotundato-obtusis, 70-80 × 12-16, octosporis; paraphysibus filiformibus, hyalinis, septatis; sporidiis oblique monostichis v. subdistichis, oblonge fusoidis v. clavatis, utrinque obtusiusculis, primo hyalinis,

continuis v. medio 1-septatis, deinde fusciculis, 7-septatis, interrupte muralibus, 20-25 \times 5-6.

Hab. in ramis decorticatis *Acaciae* ascendentis, Kerguelen Magnetbergis (E. WERTH).

18. *Pleospora rudis* Berl. in N. Giorn. bot. ital. XX (1888) p. 45, 4286 t. I, f. 12, Ic. fung. II, p. 9, t. X, f. 1. — Peritheciis atris, epidermide tectis, globoso-conoideis, 300 μ . diam., ostiolo obtusissimo vix conspicuo suberumpentibus, ascis oblongo-clavatis in stipitem nodulosum abeuntibus, 90-100 \times 27-30, octosporis; sporidiis subdistichis, ovoideo-oblongis, utrinque rotundatis vel deorsum tenuatis, medio subconstrictis, sursum crassioribus, 4-septatis parceque muriformibus, 28-32 \times 12-14, fuligineis.

Hab. in caulibus emortuis *Astragali* *Johannis* in montibus Persiae australis.

19. *Pleospora aureliana* Fairman, Ann. Mycol. IV (1906) pag. 328, 4286 fig. 3. — Peritheciis sparsis, erumpenti-superficialibus, minutis, depresso-globosis, atris; ascis oblongo-clavatis, apice late rotundatis, breve noduloso-stipitatis, octosporis, 113 \times 20-23; paraphysibus filiformibus; sporidiis subellipsoideis, medio constrictis, 6-9-septatis, sursum crassioribus, muriformibus, guttulatis, distichis, initio hyalinis vel pallide flavis, deinde fuscis, 27-30 \times 10-13.

Hab. in superficie externa leguminis *Robiniae* *Pseudacaciae*, Lyndonville Orleans C. (= *Aurelia*, unde nomen speciei), New York America bor. — A *Pleospora leguminum* satis diversa.

20. *Pleospora spinosae* Rolland, Bull. Soc. Mycol. Fr. (1905) p. 25, t. I, 4287 f. 3. — Peritheciis gregariis, cortice infossis, epidermidem pustulatim inflatam ostiolo papillato perforantibus, subglobosis, 0,2-0,5 mm. diam., contextu parenchymatico; ascis tereti-clavatis 100-150 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis monostichis, oblongis, utrinque paullulo rotundato-tenuatis crasse 3-4-septatis parceque muriformibus, ad septa, praesertim medium, constrictis, rufis, 18 \times 8.

Hab. in ramulis *Calycotomae spinosae*, Sa Coma et Como negra in insul. Balearibus.

21. *Pleospora persica* Syd., Ann. Mycol. VI (1908) p. 18. — Peritheciis sparsis vel aggregatis, diutius epidermidem tectis, atris, depresso-globosis, 200-350 μ . diam., membranaceis, basi hyphis fuscis septatis praeditis, glabris; ascis variae formae, plerumque saccatis vel late cylindraceis, saepe varie curvis, subsessilibus, 110-200 \times 30-55, octosporis; sporidiis irregulariter distichis, subclavatis, to-

tis transverse 8-9-septatis, ad septum tertium superum plerumque valde constrictis ideoque quasi e duobus segmentis constantibus, segmento supero brevior sed crassior, infero multo longior sed angustior, longitudinaliter 1-2-septatis, brunneis, totis 42-58 \times 12-21, segmento supero apice rotundato ibique membrana hyalina valde incrassata (usque ad 5 μ .) prædito.

Hab. in caulibus siccis *Diplotæniæ cachrydifoliæ*, ad Jaila Assalek inter Asadbar et Gerab, Elbrus occid. Persiæ (J. BORNMÜLLER).

22. *Pleospora intermedia* Speg., *Fungi Chilenses* (1910) pag. 88. — 4239

Peritheciis sparsis epidermide plus minusve dealbata tectis, lenticulari-conoideis, vix papillato-ostiolatis, atris, coriacellis, 150 μ . diam.; ascis clavulatis, modice pedicellatis, densissime paraphysatis, 100-120 \times 14-16, octosporis; sporidiis anguste ellipsoideo-subcylindraceis, transverse 5-septatis, ad septa, ad medium præcipue, constrictulis, mediocribus, olivaceis, loculis, 1-2 v. 4 centralibus septo altero continuo divisus, 20-24 \times 8-10.

Hab. in pedunculis siccis *Asteriscii chilensis*, Cerro Caracol de Concepcion Chile Amer. austr. — *Pleosp. medicæ* affinis sed distincta.

23. *Pleospora kerguelensis* P. Henn., *Deutsche Südpolar-Exped.* Bd. 4240

VIII (1906) Extr. p. 11, tab. II, fig. 9 a-b. — Peritheciis sparsis, innato-erumpentibus, subglobosis v. ovoideis, atro-membranaceis, subpapillato-pertusis, 150-200 μ . diam.; ascis late clavatis, vertice rotundato obtusis, ad basim attenuatis, 140-185 \times 20-30, octosporis; paraphysibus filiformibus, pluriseptatis, submoniliformibus, hyalinis, 3-4 μ . cr.; sporidiis oblique monostichis vel subdistichis, oblonge ellipsoideis v. subfusoides v. subclavatis, obtusis, melleis dein fusco-brunneis, 7-septatis, 2-3-interrupte muraliformi-divisis, cellulis constrictiusculis, medio haud constrictis, 30-40 \times 11-15.

Hab. in foliis *Azorellæ Selaginis*, Kerguelen, Grüne Insel (E. WERTH).

24. *Pleospora Jaapiana* Rehm, in Jaap Abh. Bot. Ver. Prov. Bran- 4241

denb. II (1907) p. 16. — Peritheciis gregariis, primum immersis dein liberis, sessilibus, globoso-conoideis breviter ostiolato-papillatis, demum collabescendo depressis, levibus, membranaceis, 250-300 μ . d.; ascis elongato-clavatis, supra rotundatis, 150-180 μ . long., 40-45 μ . cr., octosporis; sporidiis elongatis, utrinque acutatis, fere parallelogrammicis, medio quandoque constrictulis, primum 3-dein 7-septatis, cellulis intermediis crassioribus, nucleos crassos

oleosos includentibus, flavo-stramineis, 42-55 (plerumque 45) \times 17-22, distichis; paraphysibus filiformibus, septatis, hyalinis.

Hab. in caulibus siccis vetustis *Plantaginis maritimæ*, in Ins. Röm Schleswig-Holst., Germania. — Ob sporidia parallelogrammiformia, nec ovoidea v. fusoidea, ab affinis speciebus distincta.

25. *Pleospora breviasca* Berl. in N. Giorn. bot. it XX (1888) p. 45, 4242 t. I, fig. 14, Ic. fung. II, p. 9, t. X, f. 3. — Peritheciis sparsis, minutis, 200 μ . diam., epidermide velatis, ostiolo papillato-conoideo erumpentibus; ascis oblongis, brevissime et crasse nodulostipitatis, octosporis, 70-80 \times 22-24; sporidiis subdistichis ovoideo-oblongis, utrinque rotundatis, medio leniter constrictis, 24-28 \times 13-15, transverse 5-septatis, septis mediis ternis primariis multo crassioribus, loculis septo longit. divisis, melleis, muco obvolutis.

Hab. in ramulis *Euphrasie luteæ*, Vigheffio pr. Parmam Ital. bor. (PASSERINI).

26. *Pleospora magnifica* Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4243 p. 221. — Peritheciis minutis, primum epidermide tenui tectis, dein erumpentibus v. subsuperficialibus, hemisphæricis v. depresso-globosis, nigris, ostiolo minuto inconspicuo præditis; ascis oblongis; cylindraceis, 200-240 \times 48-60; sporidiis magnis, coloratis, confertis v. distichis, oblongis v. uno apice leniter angustatis, obtusis, 7-9-septatis et septis 3 longit. præditis, 65-75 \times 25-35.

Hab. in caulibus siccis *Phlogis* sp., Silver Lake, Utah Amer. bor. (A. O. GARRETT).

27. *Pleospora Asclepiadearum* Mac Alp., Austral. Fungi Dec. I-II, 4244 pag. 378 (Proceed. Linn. Soc. New S. Wal. 1902) — Peritheciis subgregariis, epidermide tectis, dein partim nudatis, minutis, nigris, punctiformibus, globosis, 190-225 μ . diam. ostiolo minuto; ascis oblongo-cylindraceis, apice rotundatis, 100 \times 17-19, in basim nodulosam tenuatis; paraphysibus hyalinis, ascum æquantibus, apice usque ad 11 μ . dilatatis; sporidiis distichis v. partim submonostichis, ellipsoideis, 5-septatis, ad septa constrictis, septis longitudinalibus quaternis partitis seu muriformibus, 28-30 \times 10-12, olivaceis.

Hab. in foliis *Hoyæ carnosæ* in Australia merid. (MOLINEUX). — Inter perithecia adsunt hyphæ septatæ, ramosæ, fumoso-brunneæ.

28. *Pleospora robusta* Speg., An. Mus. Nac. Buenos Aires t. XIX 4245 (1909) p. 390. — Peritheciis primo cortice tectis dein denudato-

superficialibus subcarbonaceis e lenticulari subglobosis 150 μ . diam.; ascis subcylindraceis vix pedicellatis 7-10 in quoque perithecio 100 \approx 30-40, pseudoparaphysibus paucis commixtis; sporidiis tristichis utrinque obtusis 28-34 \approx 14-18, 3-septatis, ad septa, ad medium præcipue, constrictis, longitudinaliter 1-septatis, primo lutescentibus serius subopace fuliginis.

Hab. ad ramulos emortuos *Menodoræ robustæ* in aridis secus Rio Chubut Argentina America austr.

29. *Pleospora Boldæ* Speg., *Fungi Chilenses* (1910) p. 87. — Peritheciis sparsis subepidermicis lenticularibus coriacellis, minutis, atris, 120-180 μ . diam.; ascis cylindraceo-subclavulatis, paraphysatis modice pedicellatis, p. spor. 80 \approx 13-14, totis usque ad 100 μ . long.; sporidiis subellipsoideis fusco-fumosis submediocribus, 3-septatis ad medium constrictis, loculis 1-2 centralibus septo altero verticali sæpius divis, 17-19 \approx 7-8. 4246

Hab. in ramulis siccis *Boldæ fragran* is pr. Talcahuano Chile Amer. austr.

30. *Pleospora osyridigena* Bubák, *Bull. Herb. Boiss.* 2. sér., VI (1906) p. 402. — Peritheciis in cortice sub epidermide infossis, dein prominulis, globosis, 300-450 μ . latis, nigris, contextu crasso nigro minute parenchymatico; ascis cylindraceis 120-140 \approx 11-13, supra rotundatis infra in pedicellum brevem angustatis, octosporis, paraphysibus longissimis, filiformibus, tenuibus obsitis; sporidiis fuscoideis, elongatis, 16-24 \approx 6,5-8,5, ex olivaceo-brunneis pallide castaneo-brunneis transverse 3-4 raro usque ad 5-septatis et septo longitudinali plus v. minus distincto præditis, non v. leniter constrictis, apice sæpe acutatis v. rotundatis, monostichis v. supra subdistichis. 4247

Hab. in ramis emortuis *Osyridis albæ* prope Ulcinj Montenegro.

31. *Pleospora Onosmatis* Hollós, *Ann. Mus. Nat. Hung.* IV (1906) p. 333, tab. VIII, fig. 4. — Peritheciis gregariis sparsisque epidermide tectis, dein superficialibus, depresso-globosis, glabris, nigris, ostiolo brevi cylindraceo, 280-350 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis 2-4-6-8-sporis, 60-100 \approx 12-16; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. distichis, oblongo-ellipsoideis, flavis, 7-septatis, ad septa constrictis, loculis 1-2-3 longitudinaliter septis divis, 34-44 \approx 10-12 in ascis bisporis, 30 \approx 8 in ascis 4-6-8-sporis. 4248

Hab. in caulibus siccis *Onosmatis arenarii* prope Izsák Hungariæ.

32. *Pleospora Sideritidis* Hollós, Ann. Mus. Nat. Hung. V (1907) 4249 V p. 455. — Peritheciis sparsis, epidermide tectis, depresso-globosis, fuscis, ostiolo papillato, 150-180 μ . diam.; ascis clavatis, breve stipitatis, 8-sporis, 110-140 \times 40-60, filiformi-paraphysatis; sporidiis 2-3-stichis, oblongo-ellipsoideis, 7-septatis, ad septum medium validius constrictis, in longitudine imperfecte uni-septatis, hyalinis, 46-50 \times 20-22.

Hab. in foliis languidis *Sideritidis montanæ* pr. Kecske-mét Hungariæ. — An potius *Catharinice* sp.?

33. *Pleospora Helichrysi* Hollós, Növényt. Közlemén. VI (1907) Extr. 4250 p. 3. — Peritheciis gregariis sparsisque, superficialibus, globoso-depressis, glabris, nigris, minute papillato-ostiolutis, 280-350 μ . diam., contextu parenchymatico; ascis clavatis, breve stipitatis, octosporis, 100-120 \times 12-14; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. inordinate distichis, clavatis, parte superiore crassiore, deorsum leniter attenuatis, rectis v. sæpe curvulis, 5-6-septatis, ad medium valde constrictis, loculis 1-2-3 longitudinaliter v. oblique divis, flavidulis, 24-30 \times 7-10.

Hab. in caulibus siccis *Helichrysi arenarii* prope Kecske-mét Hungariæ.

34. *Pleospora Proustiae* Speg., An. Mus. Nac. Buenos Aires t. XIX 4251 (1909) pag. 392. — Maculis nullis sed ligno toto cinerescente et rimuloso; peritheciis ligno denudato subsuperficialibus, membranaceis in sicco corrugato-contractis, laxè gregariis v. subseriatis, globuloso-conoideis, 200-250 μ . diam.; ascis ellipsoideo-subclavulatis, subsessilibus 140-150 \times 30-32, parcissime paraphysatis, octosporis; sporidiis elliptico-didymis, 38 \times 18, muriformibus, septis transversis 7, longitudinalibus 1-3 interruptis, primo flavescentibus dein fuligineis, rectis v. leniter inæquilateralibus.

Hab. ad ramos vivos v. languidos *Proustiae ilicifoliae* in præandinis Cachaeta prope Mendoza Rep. Argentina Amer. austr. — Notis nonnullis externis ad *Teichosporam* vergit, sed peritheciis membranaceis sporarumque fabrica melius sub *Pleospora* militat.

35. *Pleospora Chuquiragæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4252 (1909) pag. 390. — Foliis infectis totis arescentibus v. pro parte pallide cinerescens; peritheciis laxè gregariis coriaccellis innato-erumpentibus subhemisphaericis 120-150 μ . diam., non v. vix papillulato-ostiolutis; ascis cylindræis breviter pedicellatis 80-90 \times

20, parvissime paraphysatis, octosporis; sporidiis eximie polymorphis plerumque subellipsoideis 1-3-5 transverse septatis, septo long. nullo v. uno, ad septum medium præcipue constrictulis, 24-25 \approx 11-12, mox intense olivaceis fere opacis.

Hab. ad folia arida Chuquiragæ hystricis, secus Rio Santa Cruz, Rep. Argentina Amer. aust.

36. *Pleospora putrefaciens* Frank, Krankheit. der Pflanz. II (1896) 4253

p. 299-300, c. f. 1, Prillieux Malad. plant. agric. II, p. 245, f. 339.

— Peritheciis initio tectis, demum epidermide secedente liberis; ascis oblongo-clavatis, octosporis, subsessilibus; sporidiis inæqualiter monostichis, ellipsoideo-oblongis, utrinque rotundatis, 7-septatis crebreque muriformibus, 28 \approx 9, brunneis, oculis guttulatis.

Hab. in foliis languidis v. jam emortuis Betæ vulgaris in Germania. — In fungilli evolutione præcedit stat. conidioph. (*Clasterosporium putrefaciens* (Fuck.) Sacc. Syll. IV, p. 393) qui Betæ plantas valde vexat et forte necat.

37. *Pleospora Halimi* Maubl., Bull. Soc. Myc. Fr. (1905) p. 89, t. VI, 4254

f. 6. — Peritheciis gregariis, primo tectis, demum superficialibus, depresso-conoideis, nigris, 0,2-0,3 mm. diam.; ascis clavatis, subsessilibus, crasse tunicatis, 80-100 \approx 18-24, rarius cylindræis, 150 \approx 16, octosporis filiformi-paraphysatis; sporidiis irregulariter distichis v. in asco cylindrico monostichis, oblongo-ovoideis, primo 3-septatis muriformibusque, melleo-fuscis, 20-26 \approx 10-12,5.

Hab. in ramulis Atriplicis Halimi, Pornic Galliæ. — Verisimiliter *Camarosporium Halimi*, quocum species crescit, est st. pycnidicus.

38. *Pleospora Salicorniæ* Jaap, Abh. Bot. Ver. Prov. Brandenb. II 4255

(1907) p. 16. — Peritheciis sparsis, tectis, dein liberis, globosis, 250-350 μ . diam., parietibus 5-6 μ . cr. (?) et ostiolo brevi conoideo præditis; ascis late clavatis, dein clavato-cylindræis, 135 \approx 21, pedicello brevi 8-10 μ . longo præditis, maturis usque ad 200-300 μ . long., octosporis; sporidiis plerumque oblique distichis v. in ascis elongatis recte monostichis, flavo-melleis, ovoideo-elongatis, apice plerumque late rotundatis, 24-28 \approx 12-13, transverse 7-septatis, longitudinaliter 1-2, medio distincte constrictis; paraphysibus filiformibus, hyalinis, 3 μ . cr., septatis, multiguttulatis.

Hab. in caulibus vetustis Salicorniæ herbacæe pr. Morsum in Ins. Sylt, Schleswig-Holst. Germania. — *Pl. Salsolæ* Fuck. affinis. Socia adest *Diplodina Salicorniæ* Jaap, n. sp.

39. *Pleospora aurea* Ell. et Ever. North Amer. Pyr. (1892) p. 340, 4256

t. XXVIII, f. 14-17, Mac Alp. Fung. Stone fruit Austr. t. XXII, fig. 53-55. — Peritheciis gregariis, epidermide tectis, 250-300 μ . diam., mox collapsis; contextu crasse parenchymatico præditis, basi mycelio repente, septato, parce ramoso cinctis; ascis amplis, obtusis, sessilibus, 75-114 \times 25; sporidiis distichis, ellipsoideis, applanatis, 4-septatis, aureis, 22-25 \times 12-14 e latere 10-11 μ . cr., loculis mediis ternis septo longit. divis.

Hab. in caulibus herbaceis, Utah Amer. bor. (HARKNESS).

40. *Pleospora Fagi* Lind, Ann. Mycol. V (1907) p. 274, cum icon. 4257

— Maculis epiphyllis orbicularibus, 2-3 mm. diam., pallescentibus, late nigro-marginatis; peritheciis epidermide tectis, sparsis, globosis, vix 200 μ . diam., levibus, prominentibus; ascis ellipsoideo-clavulatis, sessilibus, octosporis, 82-92 \times 20; paraphysibus numerosis, filiformibus, septatis, hyalinis, obtusis, apice circa 3 μ . cr.; sporidiis distichis, oblongo-ovoideis, rectis, utrinque late rotundatis, 5-septatis, loculis mediis septo longitudinali præditis, non constrictis, flavis, 24-30 \times 9-10.

Hab. in foliis siccis *Fagi* silvaticæ prope Wiborg in Jütland, Dania.

41. *Pleospora mollis* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4258

Arkiv f. Bot. Bd. V (1905) p. 24, fig. 21. — Peritheciis immersis, per rimas peridermii gregatim sæpissime in series longitudinales ordinatis erumpentibus, sphæroideis vel mutua pressione difformibus, fere astomis, denique vertice ore minuto perforatis, rugosiusculis, interdum minute plicatulis, reliquiis matricis dispersis, contextu mollissimo, parenchymatico, 125-150 μ . d.; ascis octosporis, ellipsoideo-ovatis, sursum rotundatis et incrassatis, sessilibus 56-63 \times 25-30, interdum cylindraceo-clavatis, c. 100 \times 19, noduloso-pedicellatis; sporidiis plerumque conglobatis, ellipsoideo-oblongatis, inæquilateralibus, interdum fere soleæformibus, triseptatis, medio constrictis, parte supra septum medium latiore, uno alterove loculo sepimento longitudinali vel obliquo partito, loculis sæpe guttulatibus, flavis, denique fuligineis, 21,5-25,5 \times 9; paraphysibus vix ullis.

Hab. in ramulis aridis *Ephedrae* americanæ, Prov. Jujuy, Moreno Argentina. — A *P. Ephedrae* Fabr. et homonyma *P. Ephedrae* Speg. diversissima; textura autem et peritheciis aggregatis *Cucurbitariæ Ephedrae* Tassi affinis est, a qua species nostra, facile *Cucurbitariæ* adscribenda, peritheciis multo minoribus et forma ascorum dignoscitur.

42. *Pleospora oblongispora* Rehm, Ann. Mycol. V (1907) p. 542. — 4259

Peritheciis gregariis, innatis, globulosis, papillula minutissima prominente demum prorumpentibus, glabris, nigro-fusculis, contextu parenchymatico, 180-200 μ . diam.; ascis clavatis, subsessilibus, 70 \times 12, 8-sporis; sporidiis oblongis, rectis, utrinque valde rotundatis, transverse 5-septatis, cellulis singularibus 2-3 semel longitudinaliter divis, flavis, 15-18 \times 6-7, distichis; paraphysibus septatis, fere articulatis.

Hab. ad ramulos *Laricis* deciduæ, Meiringen. Helvetiæ (JAAP). — A *Pleospora laricina* Rehm et *P. obducente* f. *Laricis* Sacc. penitus diversa.

43. *Pleospora Hyacinthi* Sorauer, Pflanzk. II (1886) p. 340, t. 14, f. 10. — 4260

17. — Peritheciis gregariis globoso-lenticularibus, poro pertusis, ex mycelii hyphis brunneis copiosis ramosis orientibus, initio epidermide velatis, 330 μ . lat., 200-275 μ . alt., nigris; ascis articulatoparaphysatis, clavatis, subsessilibus, apice rotundatis, 200 \times 35, octosporis; sporidiis distichis, ellipsoideis, utrinque rotundatis, sursum crassioribus, 7-8-septatis denseque muriformibus, non v. vix constrictis, 26-37 \times 15-17, brunneis.

Hab. in foliis, quæ nigrescunt, *Hyacinthi* orientalis in Germania. — Species valde noxia.

44. *Pleospora pulchra* Kirschst, Verh. Bot. Ver. Brandenb. XLVIII 4261

(1906) p. 57. — Peritheciis in maculis rubidis insidentibus, sparsis, nigris, globosis, membranaceis, immersis, sed ostiolo brevi cylindraceo prominulis, 250 μ . circ. diam.; ascis cylindraceis, subsessilibus, supra rotundatis, octosporis, 130-180 \times 26-33; sporidiis distichis, ovoideis, medio constrictis, transverse 11-14-longitudinaliter 2-septatis, flavis, dein brunneis, 30-40 \times 10-12; paraphysibus numerosis, filiformibus.

Hab. in culmis putrescentibus *Typhæ* latifoliæ, Igelpfuhl prope Gross-Behnitz Germaniæ.

45. *Pleospora Lapageriæ* Speg., Fungi Chilenses (1910) pag. 93. — 4262

Maculis nullis; peritheciis amphigenis, parenchymate innatis, epidermide tectis, atris, minutis, glabris, poro pertusis, 250 μ . diam.; ascis e cylindraceo subclavulatis, paraphysatis, octosporis, breviter pedicellatis, 180-200 \times 28-30; sporidiis ellipsoideo-subobovatis, transverse 7-septatis, ad septum medium leniter constrictis, septis 1 v. 2 longitudinalibus divis, primo luteis tunica mucosa vestitis, serius fuliginis nudis, 30-42 \times 16-18.

Hab. in foliis emortuis et putrescentibus *Lapageriæ* roseæ

in silvis prope Cerro Caracol de Concepcion Chile Amer. austr. — Sporidiis nonnullis videntur lateraliter compressis ideoque illis gen. *Clathrospora* similibus.

46. *Pleospora Puyæ* Speg., Fungi Chilenses (1910) p. 85, cum icon. 4263

Peritheciis laxè gregariis parenchymate immersis, epidermide velatis, subglobosis, coriacellis, 200 μ . diam.; ascis cylindraceutis apapophysatis, brevissime pedicellatis, 100-120 \times 14; sporidiis oblique monostichis ellipsoideis sæpius 3-septatis, ad septum medium constrictis, loculis centralibus longitudinaliter, rarius etiam transverse divisis, 18-20 \times 8-9.

Hab. in foliis putrescentibus Puyæ cæruleæ, Cerro S. Cristobal de Santiago Chile Amer. austr. — *Pl. Thumenianæ* Sacc. affinis a qua differt paraphysisibus nullis.

47. *Pleospora proteosperma* Speg., Fungi Chilenses (1910) pag. 90 4264

(sub *proteispora*) et p. 199 (Errata-Corrige) cum icon. — Peritheciis sparsis v. laxè gregariis parenchymate plus minusve immersis, epidermide semper tectis, subconoideis, atris coriacellis, centro collabescentibus, 250 μ . diam.; ascis cylindraceutis v. saccatis, subparaphysatis, 2-4-6-8-sporis, 80-140 \times 20-28; sporidiis sæpe in eodem asco variabilibus sæpius obovatis subdidymis, septis transversis 1, 3, 5, 7, loculis 0, 1, 2 v. omnibus septis longitudinalibus 1 v. 2 divisis, primo luteis serius fusco-flavescentibus, nudis vel tunica mucosa vestitis, 20-22 \times 8-10, 28-30 \times 11-12, 35-40 \times 14-18.

Hab. in foliis emortuis putrescentibus Puyæ chilensis Cerro Alegre de Valparaiso Chile Amer. austr.

48. *Pleospora præandina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4265

(1909) p. 392. — Maculis nullis sed matrice tota sordide cinereo-arescenti; peritheciis hinc inde laxè gregariis epidermide velatis ostiolo valide papillato erumpentibus, 200-250 μ . diam.; ascis subcylindraceutis pedicello brevissimo crasso suffultis, 85-90 \times 16-20, paraphysisibus filiformibus parvis obvallatis, octosporis; sporidiis elliptico-didymis, transverse 7- longitudinaliter 1-2-septatis, 22-25 \times 10-11, primo fuligineis serius atris opacis.

Hab. ad folia arida putrescentia Dyckiiæ cujusdam in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

49. *Pleospora gigaspora* Karst. — Syll. IX, p. 890 — var. *meridiana* 4266

Roll. Bull. Soc. Myc. Fr. (1905) p. 25. — Peritheciis sphæroideis, 300-400 μ . diam., ostiolo obtuso emergente; ascis 200-300 \times 50-60, octosporis; sporidiis 8-10-septato-muriformibus, 60-74 \times 24-26, fusco-olivaceis, circulo hyalino tenuissimo obvolutis.

Hab. in foliis languidis *Asphodeli macrocarpi*, Sa Font de S'Olla et Sa Coma in insulis Balearibus.

50. *Pleospora mauritanica* Maire, Bull. Soc. Bot. Fr. LIII (1906 4267 ed. 1907) pag. CXCII. — Peritheciis immersis, dein epidermide delapsa nudatis, rotundatis, nigris, apice ostiolo epapillato pertusis; ascis cylindraceis, octosporis, subsessilibus, circ. 40-150 \times 40; sporidiis distichis, flavo-brunneis, majusculis, ellipsoideis, utrinque rotundatis, levibus, transverse 7-9-septatis, longitudinaliter 2-4-seriatim septatis, 45-52 \times 16-21, rarius usque ad 60 \times 26.

Hab. in caulibus aridis *Asphodeli cerasiferi*, in silvis inter Tlemcen et Hafir Africae bor. — A *Pl. Asphodeli* sporidiis majoribus, magis septatis, obscurioribus diversa.

51. *Pleospora mallorquina* Roll. Bull. Soc. Mycol. Fr. (1905) p. 26, t. I, 4263 f. 4. — Peritheciis globoso-depressis, 0,5 mm. diam., epidermide velatis, subseriatis, papilla vix visibili emergente; contextu parenchymatico; ascis ovoideis vel cylindraceis, crassis, 120-207 \times 50, octosporis, breviter subgloboso-stipitatis, filiformi-paraphysatis; sporidiis 2-3-stichis, primo subfusoides, dein ovoideis, melleis, initio 3-septatis, septisque 1-2 longitudinalibus partitis, demum octoseptato-muriformibus, soleiformibus, 52-54 \times 20.

Hab. in caulibus *Urgineæ Scillæ*, Como Negra in insul. Balearibus. — *Pleosporæ Saccardoi* affinis.

52. *Pleospora Alstræmeriæ* Speg., Fungi Chilenses (1910) p. 90. — 4269 Peritheciis sparsis v. laxe gregariis matrice infusata insidentibus, primo epidermide tectis, sublenticularibus, minute papillato-ostiolatis, coriacellis, 150-200 μ . diam.; ascis cylindraceis v. subsaccatis, subsessilibus non v. parce paraphysatis, octosporis; sporidiis in eodem asco sæpius dimorphis, alteris subclavulato-didymis 3-septatis, loculo unico longitudinaliter diviso 24-26 \times 12-14, alteris paullo majoribus 28-30 \times 14-16, subellipsoideis transverse 7-septatis constrictulis, oculis pluribus septis 1 v. 2 longitudinalibus interruptis divisis, omnibus plus minusve lutescentibus.

Hab. in scapis floralibus siccis *Alstræmeriæ*, Cerro Alegre de Valparaiso Chile Amer. austr. — *Pl. herbarum* affinis.

53. *Pleospora Orchidearum* P. Henn., Hedw. XLIV (1905) p. 170. 4270 — Peritheciis cauliculis erumpenti-superficialibus, sparsis v. subgregariis, subglobosis, sæpe vertice depressis, perforatis, subcoriaceis, atris, 180-200 μ . diam.; ascis clavatis apice rotundatis, tunicatis, basi curvulis attenuatis, 8-sporis, 100-150 \times 18-30; sporidiis subdistichis, oblonge fusoides vel subellipsoideis, utrinque obtu-

siusculis, flavis dein brunneis, 7-septatis, muralii-divisis, 25-38 \times 10-16.

Hab. in caulibus Phaji Wallichii in calidariis horti botanici Berolinensis.

54. **Pleospora Neottiae** Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 4271

p. 10. — Peritheciis sparsis, tectis, depresso-globosis, glabris, fuscis, ostiolis minutis, 190-210 μ . diam., contextu celluloso; ascis clavatis, 72-84 \times 14-18, octosporis, filiformi-paraphysatis; sporidiis distichis, ellipsoideis, transverse 3-septatis, ad septa valde constrictis, loculis mediis in longitudine 1-septatis, luteis, 20-24 \times 8-10.

Hab. in foliis siccis Neottiae nidi-avis prope Kecskemét Hungariæ.

55. **Pleospora Arundinis** Giuditta Mariani, in Atti Soc. ital. Sc. nat. 4272

L (1911) p. 166, fig. 3. — Peritheciis densiuscule sparsis, foliorum parenchymate immersis, per epidermidem erumpentibus, subgloboso-depressis, atris, distincte ostiolatis, 250-350 μ . diam., contextu minute pseudoparenchymatico, fuligineo-umbrino; ascis late oblongis, subsessilibus, crasse tunicatis, 110-130 \times 24-28, octosporis; sporidiis irregulariter subdistichis, ellipsoideo-oblongis, medio aliquantulum constrictis, transverse 7-septatis septisque longitudinalibus 1-3 seriatis regulariter divisis, 27-30 \times 12-14, luteo-brunneis.

Hab. in foliis languidis Arundinis Donacis, prope Coimbra Lusitaniæ (A. MOLLER). — *Pleosporæ herbarum* certe affinis, sed, ut videtur, sporidiis minoribus distincta.

56. **Pleospora Phragmitis** Hollós, Ann. Mus. Nat. Hungar. VIII 4273

(1910) p. 10. — Peritheciis epidermide tectis, seriatim dispositis, atris, breve papillatis, ellipsoideis, 700 \times 300, contextu celluloso; ascis clavatis, breve stipitatis, octosporis, 130-160 \times 20-24; paraphysibus filiformibus, septatis; sporidiis distichis, oblongo-fusoides, rectis v. curvulis, 9-septatis, septisque uniseriatis longitrorsum divisis, ad septa leniter constrictis, melleis, demum umbrinis, 44-50 \times 10-12.

Hab. in culmis putridis Phragmitis communis prope Kecskemét Hungariæ.

57. **Pleospora Gaussian** P. Henn., Deutsche Südpolar-Exped. Bd. 4274

VIII (1906) Extr. p. 12. — Peritheciis sparsis innato-suberumpentibus, subglobosis, obtuse papillatis, atro-membranaceis, c. 120-140 μ .; ascis clavatis, obtuso-rotundatis, octosporis, 83-105 \times 10-12; paraphysibus filiformibus, septatis, hyalinis, c. 2 μ . cr.; spo-

ridiis subdistichis, oblongo-ellipsoideis v. clavatis, obtusis, 5-raro 6-septatis, murali-divisis, constrictis, $23-30 \approx 8-11$, atro-fuscis.

Hab. in foliis siccis Festuæ antarcticæ, Kerguelen-Station (E. WERTH). — A *Pl. Forsteri* Speg. peritheciis multo minoribus, ascis sporidiisque majoribus diversa.

58. *Pleospora culmicola* Speg., Fungi Chilenses (1910) p. 89. — Pe. 4275

peritheciis erumpenti-superficialibus laxè gregariis hemisphærico-conoideis, valde papillato-ostiolatis, atris glabris coriaccellis, $250-300 \mu$. diam.; ascis cylindraceo-saccatis, breviter pedicellatis, paraphysatis, $150 \approx 22-28$; sporidiis ellipsoideo-subbiconoideis medio-cribus e luteo fuscis, transverse 7-septatis, septo altero longitudinali continuo divisis, $30-36 \approx 12-14$.

Hab. in culmis Graminaceæ cujusdam (? Paspali), Cerro Caracol de Concepcion Chile America austr.

59. *Pleospora Drygalskiana* P. Henn. Deutsche Südpolar-Exped. Bd. 4276

VIII (1906) Extr. p. 12, tab. II, fig. 13 *a-b*. — Peritheciis sparsis, epidermide nigrefacta tectis, dein ostiolo erumpentibus, subglobosis v. ovoideis, atro-membranaceis, c. 150μ . diam.; ascis clavatis, apice tunicatis, rotundatis, 8-sporis, $70-100 \approx 15-22$; paraphysibus filiformibus septatis, hyalinis, 2μ . cr.; sporidiis subdistichis, fusoides, obtusis v. subacutiusculis, 4-septatis, interrupte murali-divisis, melleis dein atris, $18-24 \approx 6-11$.

Hab. in foliis emortuis Agrostidis antarcticæ, Kerguelen (E. WERTH). — A *Pl. antarctica* Speg. ascis sporidiisque latioribus, sporidiis nigro-brunneis 4-septatis diversa.

60. *Pleospora Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. 4277

VIII (1906) Extr. pag. 12, tab. II, fig. 12 *a-b*. — Peritheciis epiphyllis sparse gregariis epidermide tectis, dein ostiolo erumpentibus, lenticulari-globosis, atris, membranaceis, c. $150-170 \mu$. diam.; ascis clavatis, apice rotundatis, tunicatis, octosporis, $85-110 \approx 20-23$, paraphysibus filiformibus hyalinis; sporidiis subdistichis, oblongis v. clavatis, obtusis, 3-5-septatis, muraliter divisis, $18-25 \approx 10-14$, primò flavis dein brunneis.

Hab. in foliis Poæ Cookii, Kerguelen (E. WERTH).

61. *Pleospora Vanhöffenii* P. Henn., Deutsche Südpolar-Exped. Bd. 4278

VIII (1906) Extr. p. 12, t. II, f. 11, *a-b*. — Peritheciis amphigenis sparsis v. gregariis, primò epidermide tectis dein suberumpentibus, subglobosis, pertusis, atro-fuscis, membranaceis, $200-250 \mu$. diam.; ascis late clavatis apice tunicatis, rotundatis, basi substipitatis, curvatis, octosporis, $90-120 \approx 33-42$; paraphysibus filiformi-

bus, hyalinis, c. 2-3 μ . cr.; sporidiis subdistichis oblongis v. sub-fusoideis, apice rotundato-obtusis, interdum acutiusculis, 7-9-septatis, muriformibus, cellulis angulatis, primo melleis dein fusco-brunneis, 32-40 \times 11-14.

Hab. in foliis *Poæ Cookii*, Kerguelen Vanhöffen Insel (E. VANHÖFFEN).

62. *Pleospora Equiseti* A. L. Smith, Trans. Brit. Mycol. Soc. 1908, 4279 v. III (1909) p. 116, tab. VI, fig. 5 *a-b-c*. — Peritheciis minutis, nigro-brunneis, maculis minutis nigrantibus insidentibus, subglobosis, subepidermicis, non emergentibus, poro apertis, 200-270 μ . diam.; ascis clavatis, brevissime pedicellatis 90 \times 12; sporidiis brunneo-flavis, 5-septatis, cellulis mediis longitudinaliter septatis, 25-27 \times 6-8.

Hab. in caulibus emortuis *Equiseti*, Kilwinning Ayrshire Britannia (D. A. BOYD).

63. *Pleospora Mycenastri* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4280 p. 533. — Peritheciis gregariis, erumpentibus, depresso-globosis, fuscis, poro pertusis, 100-140 μ . diam., contextu parenchymatico; ascis clavatis, apice tunica crassa integra rotundatis, estipitatis, 8-sporis, 54-74 \times 40-50; sporidiis inordinate 2-3-stichis, oblongo-ellipsoideis, 3-septatis, non constrictis, loculo 1-2 longitudinaliter divisus, hyalinis, demum fusciscentibus, 26-32 \times 10-12.

Hab. in endoperidio *Mycenastri* *Corii* prope Kecske-mét, Hungariae.

64. *Pleospora Secotii* Hollós, Annal. Mus. Nat. Hung. IV (1906) 4281 pag. 533. — Peritheciis dense gregariis erumpentibus, depresso-globosis, fuscis, poro pertusis, 100-140 μ . diam., contextu parenchymatico; ascis clavatis, apice tunica crassa integra rotundatis, estipitatis, octosporis, 60-70 \times 26-36; sporidiis inordinate 2-3-stichis, oblongo-ellipsoideis, 3- raro 4-septatis, ad septum medium validius constrictulis, loculo 1- interdum 2-longitudinaliter divisus, loculis pluriguttulatis, diu hyalinis, demum fusciscentibus, 30-36 \times 14.

Hab. in endoperidio *Secotii* agaricoidis, prope Kecske-mét Hungariae. — An a præcedente satis distincta?

65. *Pleospora Montagnitis* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4282 pag. 532. — Peritheciis sparsis, depresso-ellipsoideis, nigris, poro pertusis, 120-250 \times 100-180, contextu parenchymatico; ascis cylindraceis, breviter stipitatis, 4-6-8-sporis, 70-90 \times 12-14; sporidiis monostichis, oblongis, 3-septatis, ad septum medium validius con-

strictulis, loculis duobus intermediis longitudinaliter divis, plurimque muriformi-septatis, flavis, dein brunneis, 18-22 \times 8-9.

Hab. in receptaculo Montagnitis radiosi (= M. Candollei) prope Izsák, Hungariæ.

CLATHROSPORA Rabenh. — Syll. IX p. 894, XVI p. 548.

1. *Clathrospora constricta* R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy (1906) Extr. pag. 10, fig. 1. — Peritheciis sparsis v. aggregatis, erumpentibus, globoso-depressis, 280-400 μ . diam., levibus, nigris, ostiolo papillato; ascis oblongo-clavatis, rectis vel curvulis, subsessilibus v. breve pedicellatis, 3-8-sporis, paraphysibus filiformibus mox liquescentibus obvallatis; ascis octosporis 95-120 \times 28-34, tetrasporis 85-105 \times 28-31; sporidiis distichis, levibus, brunneis, ellipsoideo-complanatis, sursum plerumque rotundatis v. obtusis, deorsum sæpe plus minusve acutatis, transverse 3-septatis (loculis mediis septo longitudinali divis), ad septa constrictis, 29-37 \times 16-19 \times 11-13.

Hab. in caulibus aridis *Gypsophilæ olympicæ* in zona alpina Olympi Bithynici, Anatolia.

2. *Clathrospora* ? *punctiformis* (Niessl) Berl. — Syll. II, p. 271 (*Pleo- spora*) — var. *alpina* Rehm, Oesterr. bot. Ztschr. LVI (1906) p. 297. — Nomen nudum.

Hab. in caulibus siccis *Junci Hostii*, Alpeiner-Alpe Stubai Austria.

3. *Clathrospora tirolensis* Rehm, Oesterr. bot. Ztschr. LVI (1906) p. 297. — Nomen nudum.

Hab. in culmis Graminacearum, Konstanzer Hütte Airlberg Austria.

4. *Clathrospora Stipæ* Trav. in Bull. Soc. Flore Valdôtaine, VIII (1912). — Peritheciis sparsis vel seriatis, parenchymate immersis eoque arcte adhærentibus, epidermide pustulatim elevatula diu omnino tectis, demum vix erumpentibus, globoso-depressis, 250-300 \times 150-200, atris, glabris, excipulo minute et irregulariter pseudoparenchymatico, fuligineo-atro, ostiolo papillulato, poro latiusculo pertuso; ascis obovoideo-clavatis v. oblongis, sessilibus, apice late rotundatis ibique tunica vix incrassata, 110-120 \times 30-36, paraphysibus filiformibus ascos subæquantibus, ad 3 μ . crassis obvallatis; sporidiis irregulariter 2-3-sticho-confertis, e fronte visis ellipsoideis, 36-40 \times 18-19, e latere subfusoides, 36-40 \times 10-12, septis

transversis 7-9, longitudinalibus 3, ad septa singula vix constrictis, flavo-lutescentibus.

Hab. in foliis siccis Stipæ pennatæ supra Berio, alt. 1700 m. (Valpelline, Valle d'Aosta, Ital. bor.). — Affinis *Cl. Elynæ*, in Cyperaceis, a qua satis differt ascis et sporidiis minoribus. Forma depressa sporidiorum in ipso asco plerumque eximie manifesta.

PYRENOPHORA Fr. — Syll. II 277, IX p. 895, XI p. 344, XIV p. 602, XVI p. 549, XVII p. 757:

1. *Pyrenophora pachyasca* Syd., Ann. Mycol. VI (1908) p. 529. — 4287
Peritheciis sparsis, subglobosis, atris, minutis, 150-225 μ . diam., epidermide diu tectis, submembranaceis, superne setis fuliginéis rigidis fragilibus septatis, apicem versus dilutioribus, usque ad 250 μ . longis obsitis, ostiolo minuto; ascis variabilibus, saccatis et subsessilibus usque cylindraceis et stipite usque ad 35 μ . longo suffultis, octosporis, 100-130(-175) \approx 45-60; sporidiis irregulariter distichis, ovato-oblongis, utrinque rotundatis, longitudinaliter plerumque 7-septatis, verticaliter, 2-4-septatis, medio constrictis, obscure olivaceo-brunneis et subopacis, 35-52 \approx 20-25

Hab. in foliis Astragali Raswendi in montibus Tefresch Persiæ occ. (Th. STRAUSS). — *P. Androsaces* (Fuck.) Sacc. affinis, ab ea differt setulis longioribus, sporidiis medio constrictis.

2. *Pyrenophora* ? *ambigua* Berl. et Bres. — Syll. IX, pag. 896 — 4288
var. *sexseptata* Rehm, Oest. Bot. Ztschr. LVI (1906) p. 297. — Nomen nudum.

Hab. in caulibus Cerastii, Alpeiner-Alpe Stubai Austria.

3. *Pyrenophora ampla* Syd., Ann. Mycol. IV (1906) p. 343. — Pe. 4289
Peritheciis sparsis, subcutaneis, tandem erumpentibus, globoso-depressis, ca. 175-220 μ . diam., ostiolo minuto, primo setulis simplicibus erectis rigidis septulatis opacis apice non dilutioribus ca. 175 μ . longis, 7 μ . latis obsessis, tandem calvescentibus, membranaceo-coriaceis, atris; ascis amplis, late ellipsoideis, brevissime stipitatis, 140-180 \approx 50-65, octosporis; sporidiis irregulariter di-tristichis, oblongis, utrinque rotundatis, rectis vel leniter curvulis, transverse 10-14-septatis, longitudinaliter 2-3-septatis, ad septa constrictis, olivaceo-brunneis, tandem obscurioribus et subopacis, 52-72 \approx 21-28.

Hab. in foliis petiolisque emortuis Anemones tetonensis, Big Cottonwood Canyon, Salt Lake Co., Utah Americæ bor. (A. O. GARRETT).

4. *Pyrenophora Astragalorum* R. Maire, Champ. Asie Min., Bull. Soc. 4290

Sc. Nancy (1906) Extr. p. 9. — Peritheciis sparsis, primo tectis dein erumpentibus, subglobosis, apice setis rigidis, longiusculis, acutis, levibus, fuliginéis, divergentibus ornatis, 200-300 μ . diam.; ascis cylindræis v. clavatis, 80-130 \times 26-36, paraphysatis, 2-8-sporis; sporidiis distichis oblongis 34-50 \times 14-26 rarius usque ad 80 \times 28, flavo-brunneis, dein fuliginéis, levibus, dense muralibus, transverse 7-9-septatis, longitudinaliter 3-septatis, ad septa omnia æqualiter constrictis.

Hab. in rachidibus putrescentibus foliorum *Astragali* sp., in *M. Olympo* Bithyniæ, *Astragali gummiferi*, in *M. Argæo* Anatoliæ.

5. **Pyrenophora Amphoricarpi** Bubák, Bull. Herb. Boiss. 2. sér. VI 4291

(1906) p. 402. — Peritheciis subæqualiter distributis, basi immersis, globosis v. supra leniter conoideo-productis, 170-190 μ . cr., nigris, parietibus 20-30 μ . cr., apice setulis subcæspitosis, nigris, septatis, rectis, 200-300 \times 4-5, præditis; contextu parenchymatico, extus nigro intus albedo; ascis 100-130 \times 40-50, supra rotundatis ibique 5-9 μ . incrassatis, basi breviter pedicellatis, hyalinis, octo-sporis; sporidiis ovoideo-elongatis, 35-55 \times 15-20, transverse 7-9-septatis, septo medio fortiter constrictis, utrinque rotundatis, castaneo-brunneis, in asco irregulariter positis, loculo superiori plerumque majori.

Hab. in foliis siccis *Amphoricarpi* Neumayeri M. Lovcen prope Njegos, M. Zeletin et M. Gradiste Montenegro.

6. **Pyrenophora Tetraneuris** Earle, Bull. of the New York Bot. Gard. 4292

(1904) p. 294. — Peritheciis sparsis, infossis, dein erumpentibus, obscure brunneis, non collabescentibus, circ. 200 μ . diam., ostiolo breviter papillato, setulis brunneis circumdato; ascis subcylindræis, circ. 175 \times 35; paraphysibus filiformibus; sporidiis distichis, brunneis, ellipsoideis, obtusis, 7-septatis, non constrictis quoque loculo 1-3 septis longitudinalibus diviso, circ. 40 \times 18.

Hab. in foliis emortuis *Tetraneuris* sp., King's Cañon pr. Corson Nevada Amer. bo. (C. F. BAKER).

7. **Pyrenophora Brizæ** C. Mass. in Sacc., Ann. Mycol. (1911) p. 250. 4293

— Peritheciis erumpentibus laxè disseminatis, subcarbonaceis, globosis v. ovoideis 260-300 μ . diam., superne setulis rigidis extremitate pallidioribus, septatis, 200-220 \times 6-10 coronatis; ascis breviter stipitatis, cylindræo-clavulatis, varie curvulis, 140-180 \times 32-40; paraphysibus filiformibus cito collabefactis; sporidiis octonis pallide flavis, melleis, oblongis, utrinque rotundato-obtusis, 3-septatis, lo-

culis duobus mediis v. superiore tantum longitudinaliter 1-septatis, 26-32 \times 10-14.

Hab. in foliis emortuis *Brizæ* mediæ in M. Baldo loco Val Fredda, Ital. bor. (prof. A. GOIRAN). — *Pyrenophoræ relicinæ* valde affinis sed characteribus sporidiorum, ut videtur, satis diversa.

8. *Pyrenophora filicina* J. Lind, *Micromycetes from North-East Grøn-* 4294
landia, Kiöbenhavn (1910) pag. 157, tab. X, fig. 4. — Peritheciis sparsis, erumpenti-superficialibus, globosis, majusculis, 300 μ . diam., atris, coriaceis, superne setigeris, ostiolo brevi conico; ascis oblongo-clavatis, stipite brevi, apice rotundatis, et crasse tunicatis, 8-sporis, 88-110 \times 25; ascis paraphysibusque mox liquescentibus; sporidiis subdistichis, oblongo-ovatis, retis, transverse 5-6-septatis, medio constrictis, in longitudine 1-2-septatis, primo flavis demum fuscis et totis opacis, 28-34 \times 15-17.

Hab. in petiolis emortuis *Cystopteridis fragilis*, Danmarks Havn Grønlandia.

PLEOMASSARIA Speg. — Syll. II p. 239, IX p. 872, XI p. 341, XVI p. 552, XVII p. 759.

1. *Pleomassaria Vandasii* Bubák, *Ann. Mycol.* IV (1906) p. 110. — 4295
Peritheciis subepidermicis, collo brevi papilliformi prominulis, globosis, subdepressis 300-400 μ . diam., nigris, parietibus nigricantibus, parenchymaticis, compactis, 45-70 μ . cr.; ascis elongatis vel elongato cylindraceis, stipitatis, supra rotundatis, 100-120 \times 28-33, crasse tunicatis, hyalinis, paraphysibus tenuibus numerosis incurvatis circundatis, 4-8-sporis; sporidiis ellipsoideis v. elongatis 33-42 μ . long. supra 13-17, 5 μ . basi 11-13 μ . cr., crasse tunicatis transverse 8-10- longitudinaliter 3-septatis, medio constrictulis, e brunneo-melleo obscure brunneis, strato mucoso 2-3 μ . cr. obvolutis.

Hab. in petiolis siccis foliorum *Astragali angustifolii*, Galicia-planina Macedonia (E. FORMANEK; comm. K. VANDAS).

2. *Pleomassaria Robinæ* Bubák, *Ann. Mycol.* IV (1906) p. 111. — 4296
— Peritheciis cortice immersis, solitariis v. aggregatis, plerumque breviter seriatis, apice breviter conoideo-erumpentibus, dein superiori parte prominentibus $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., subconoideis, 300-400 μ . altis, basi depressis, nigris, parietibus compactis extus flavescens, intus fere nigris usque ad 30 μ . cr.; ascis cylindraceis, supra rotundatis basi in petiolum brevem attenuatis, 130-220 \times 22-28, rectis v. curvulis, 4-8-sporis; paraphysibus numerosis incurvatis

multiseptatis obvolutis; sporidiis ex elongato-ellipsoideo elongato-cylindræis $30-65 \times 17-22$, transverse $5-8$ -longitudinaliter $1-2$ -septatis, ad septa plus minusve constrictis, flavo-brunneis.

Hab. in ramulis emortuis Robiniæ Pseudoacaciæ, Pátek prope Peruc, Bohemia.

3. *Pleomassaria muriformis* Kirschst., Verh. Bot. Ver. Brandenb. 4297 XLVII (1906) p. 57. — Peritheciis sparsis sub peridermio nidulantibus, prominulis, globosis, nigris, membranaceis, basi hyphis brunneis septatis præditis, $\frac{3}{4}$ mm. circ. diam.; ascis cylindræo-clavatis, breviter pedicellatis, supra rotundatis, octosporis, $180-200 \times 24$; sporidiis oblique monostichis v. irregulariter distichis, ovoideis, flavidis, transverse 12 -longitudinaliter $3-4$ -septatis, medio constrictis, $30-35 \times 14-16$; paraphysibus numerosis, filiformibus, septatis, circ. 2μ . cr.

Hab. in ramulis dejectis Piri Mali prope Gross-Behnitz Germaniæ.

TEICHOSPORA Fuck. — Syll. II p. 290, IX p. 899, XI p. 345, XIV p. 603, XVI p. 550, XVII p. 760.

1. *Teichospora larreiphila* Speg., An. Mus. Nac. Buenos Aires t. XIX 4298 (1909) p. 395. — Peritheciis sæpius sparsis innato-superficialibus ex hemisphærico conoideis, $200-300 \mu$. diam., levibus, carbonaceis, grosse papillato-ostiolatis; ascis linearibus brevissime coarctato-pedicellatis, $160-200 \times 15-18$, octosporis paraphysatis; sporidiis rectis monostichis late ellipsoideis transverse $5-7$ -longitudinaliter $1-2$ -septatis, fuliginéis, ad septa non v. vix constrictulis, ad medium validius, $22-28 \times 12-14$.

Hab. non rara ad latus internum corticis Larreæ cuneatæ viventis in montuosis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

2. *Teichospora cereina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4299 (1909) p. 396. — Peritheciis innato-superficialibus subcarbonaceis subglobosis $90-100 \mu$. diam., basi matrice leniter sordideque confusata insculptis, superne liberis, rotundatis, non papillato-ostiolatis; ascis cylindræis brevissime pedicellatis, 70×10 , paraphysatis, octosporis; sporidiis oblique monostichis ellipsoideis $12-14 \times 8-9$, transverse 3 -septato-torulosis, septo verticali unico, fuscis.

Hab. ad lignum denudatum ramorum Cerei Spegazzinii in hortis La Plata Rep. Argentina Amer. austr.

3. *Teichospora adesmicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4300

(1909) p. 393. — Matrice sordide cinerescente, circa perithecia infuscata; peritheciis hinc inde dense pauci-gregariis, ligno denudato insidentibus minute papillato-ostiolatis, hemisphæricis, 200-300 μ . diam., carbonaceis; ascis cylindraceutis breviter pedicellatis, 110-120 \times 20-25, dense filiformiter paraphysatis, octosporis; sporidiis elongato-ellipsoideis, constricto-didymis, transverse 5-7 verticaliter 1-septatis, 24-30 \times 10-12, primo lutescentibus dein olivaceis.

Hab. ad ramos emortuos *Adesmiæ pinifoliæ* prope Puente del Inca, Mendoza Rep. Argentina Amer. austr.

4. *Teichospora eucalyptina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4801

(1909) p. 396. — Peritheciis ligno denudato toto sordide infuscato dense gregariis basi insculptis superne liberis hemisphæricis, 150 μ . diam., minute papillulato-ostiolatis, carbonaceis; ascis subfusoides basi crassiuscule pedicellatis, 80-85 \times 16-18, pseudoparaphysatis, octosporis; sporidiis distichis, primo didymis hyalinis cribose guttulatis, serius 5-7-septatis, septo longitudinali solitario v. duplici divisio, 20 \times 8-10, plus minusve obscure fumosis.

Hab. ad truncos cariosos *Eucalypti amygdalinæ* in silva Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

5. *Teichospora Montteæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4802

(1909) p. 397. — Peritheciis in matrice infuscata sparsis subsuperficialibus, subhemisphæricis 120-150 μ . diam., carbonaceis vix papillato-ostiolatis; ascis subcylindraceutis breviter pedicellatis, 60-65 \times 14-16, paraphysatis; sporidiis elongato-obovatis didymis, loculo supero 2-septato, loculo infero valde minore 1-septato, septo longitudinali unico, 16-18 \times 6-7, fuliginosis.

Hab. ad ramos emortuos *Montteæ aphyllæ*, Chacras de Coria prope Mendoza Rep. Argentina, Amer. austr.

6. *Teichospora upsallatensis* Speg., An. Mus. Nac. Buenos Aires 4803

t. XIX (1909) p. 397. — Peritheciis in ramis denudatis grosse rimoso-fissis, sordide cinerescenti-infuscatissimis sparsis v. hinc inde laxè pauci-aggregatis, papillato-ostiolatis, subglobosis 180 μ . diam.; ascis cylindraceutis breviter cuneato-pedicellatis 80-100 \times 10-15, dense filiformiter paraphysatis, octosporis; sporidiis oblique monostichis subelongato-ellipsoideis, sæpius 3- raro 5-septato-constictis, olivaceis, 16-20 \times 8-9.

Hab. ad ramos emortuos *Lycii crassispini* circa Upsallata nec non *Larreæ nitidæ*, Cacheuta prope Mendoza Rep. Argentina Amer. austr.

7. *Teichospora Gilliesi* Speg., An. Mus. Nac. Buenos Aires t. XIX 4304 (1909) p. 394. — Matrice tota late sordideque cinerescente; peritheciis sparsis v. hinc inde laxè gregariis, levibus, lenticulari-depressis papillulato-ostiolatis 180-200 μ . diam., atris; ascis subclavulatis crassiuscule tunicatis, breviter crasseque pedicellatis, 120 \approx 15-16, octosporis, dense paraphysatis; sporidiis subellipsoideis oblique distichis rectis v. lenissime inæquilateralibus transverse sæpius 3-septatis, longitudinaliter 1-septatis, 20-25 \times 9-10, olivaceis.

Hab. ad ramos languidos *Salviæ Gilliesi* in rupestribus Cacheuta prope Mendoza Rep. Argentina Amer. austr. — Species plurimæ *Melanommatum Teichosporarumque* sub 3-septatarum regionis præandinæ inter se summopere affines, perdifficile extricandæ, facile unius speciei polymorphæ formas tantum sistunt.

8. *Teichospora Proustii* Speg., An. Mus. Nac. Buenos Aires t. XIX 4305 (1909) p. 395. — Matrice late sordideque cinerescente; peritheciis subsolitariis ligno denudato insidentibus, superficialibus lenticulari-subhemisphæricis modice papillulato-ostiolatis 400-450 μ . diam., nigris, glabris; ascis linearibus, crassiuscule tunicatis, basi abrupte breviterque cuneato-pedicellatis 150-200 \approx 18-20, 4-6-8-sporis, parce paraphysatis; sporidiis rectis v. oblique monostichis, 40 \approx 17-18, septis transversis 7-9, longitudinaliter 1-3-divisis, e flavescenti fuligineis.

Hab. ad ramos vivos et emortuos *Proustii ilicifoliæ* in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

9. *Teichospora Suædæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4306 (1909) p. 397. — Peritheciis ligno denudato reticulato-rimoso insidentibus, densiuscule gregariis sæpius collabescentibus e carnosulo membranaceis subglobosis 200-250 μ . diam., atris; ascis cylindræis brevissime pedicellatis 100-110 \approx 12-14, octosporis, paraphysatis; sporidiis oblique monostichis subobovatis didymis 3-septatis, loculo uno alterove verticaliter diviso, ad septum medium constrictis, fumoso-olivaceis, 18-20 \times 8-9.

Hab. vulgata ad ramos aridos *Suædæ divaricatæ* in Valle Upsallata prope Mendoza Rep. Argentina Amer. austr.

10. *Teichospora dispersa* (Kirschst.) Sacc. et Trott. *Strickeria dispersa* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 55. — Peritheciis sparsis, nigris, coriaccis, rugulosis, globosis, ostiolo brevi prominenti præditis, primum immersis, demum ligno nudo insidentibus, 300-400 μ . diam.; ascis cylindræis, brevissime pedicellatis, supra rotundatis, octosporis, 100-140 \approx 14-18; sporidiis

oblique mono- v. irregulariter distichis, oblongis, medio parum constrictis, transverse 5-7(plerumque 6)-septatis et longitudinaliter muraliter 2-3-septatis, flavo-melleis, dein obscure brunneis, 20-30 (plerumque 22) \times 10-12; paraphysibus filiformibus, hyalinis.

Hab. in ligno quercino decorticato in silvis prope Rathe-
now Germaniæ.

11. *Teichospora præclara* Rehm, Ann. Mycol. IV (1906) p. 336. — 4808

Peritheciis dispersis, basi cortice subinnatis, demum sessilibus, globosis, atris, scabriusculis brevissime papillulatis, poro perspicuo haud pertusis, 0,3-0,7 mm. diam. excipulo extus subfusco, intus hyalino, crasso, non carbonaceo; ascis clavatis, apice rotundatis, 250 \times 30 octosporis; sporidiis fusoideis, rectis, primitus hyalinis, dein flavido-fuscis ab initio 3-septatis, interdum medio paullulum constrictis, demum transverse 7-11-septatis, longitudinaliter 2-3-septatis, cellulis guttis oleosis magnis repletis, 60-65 \times 15-18 distichis; paraphysibus plurimis, arcte juxta positis, filiformibus, septatis, hyalinis.

Hab. ad corticem adhuc pendulum *Ostryæ virginicæ*, Lyndonville U. St. Am. (Dr. FAIRMAN). — *Teichosporæ principii* proxima, differt sporidiis longioribus et crebrius septatis.

12. *Teichospora ? andina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4809

(1909) pag. 394. — Maculis nullis; substrato toto arescenti-cinerecente; peritheciis solitariis vel pauci-gregariis erumpentibus subconoides, carbonaceis 150-180 μ . diam.; ascis cylindraceo-ellipsoideis brevissime pedicellatis 50-60 \times 20-24, octosporis, aparaphysatis; sporidiis distichis ellipsoideo-elongatis 3-septatis, loculo medio supero sæpius longitudinaliter diviso leniterque tumidiore, olivaceis, 22-25 \times 8-10.

Hab. ad ramulos emortuos *Ephedræ andinæ* in Cerro Pelado circa Mendoza Rep. Argentina Amer. austr. — *Cucurbitariæ Ephedræ* Tassi affinis, perithecorum fabrica, ascis crassioribus brevioribusque aparaphysatis recedens.

13. *Teichospora marina* Roll., Bull. Soc. Mycol. Fr. (1905) p. 27. — 4810

Peritheciis 0,3 mm. diam., globosis, papillatis, atro-nitidis, coriaceis, per fibras ligneas atro-inquinatas erumpentibus; ascis teretibus clavatis, apice rotundatis et in stipitem longiusculum basi globoso-tumidulum desinentibus, 120-140 \times 10-13, filiformi-paraphysatis, octosporis; sporidiis monostichis, ovoideis, crasse 3-septatis, constrictisque, et longitudinaliter hinc inde 1-septatis, guttatis, flavis, 14-17 \times 6-8.

Hab. in caulibus emortuis *Urgineæ Scillæ* (vulgo *Ceba marina*), Como Negra in insulis Balearibus. — Var. *Euphorbiæ* Roll., l. c. — A typo imprimis differt ascorum pedicello basi non inflato. — In caulibus emortuis *Euphorbiæ dendroidis*, Como Negra in insul. Balearibus.

Subgen. *Strickeria* Korb. em. Sacc.

14. *Teichospora larreicola* (Speg.) Sacc. et Trott., *Strickeria larrei-* 4811
cola Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 393. — Matrice tota late cinerescens; peritheciis sparsis v. gregariis, udis lenticularibus, siccis eximie cupulato-collabescentibus 150-250 μ . diam., atris, coriaceis; ascis linearibus basi abrupte breviter crasseque pedicellatis 90-110 \times 14-16, octosporis parce paraphysatis; sporidiis oblique monostichis, ellipsoideo-oblanco-latis transverse 3- longitudinaliter 1-septatis, 18-20 \times 7-8 olivaceo-virescentibus.

Hab. ad ramos cariosos denudatos *Larrea nitidæ* in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

15. *Teichospora variispora* (Kirschst.) Sacc. et Trott. *Strickeria va-* 4812
riispora Kirschst., Verh. bot. Ver. Brandenb. XLVIII (1906) p. 55. — Peritheciis sparsis v. confertis, superficialibus, nigricantibus, obtusis, coriaceis, globoso-depressis, breviter papillato-umbilicatis, 300-400 μ . diam., subsuperficialibus; ascis cylindraceis, crasse tunicatis, breviter pedicellatis, supra rotundatis; octosporis, 120-150 \times 11-14; sporidiis oblique monostichis, primum hyalinis, dein brunneolis demumque obscure brunneis, oblongo-fusoides, medio fortiter constrictis, primum 3- demum usque ad 7-septatis et 1 v. 2 longitudinaliter sed imperfecte septatis, 20-26 \times 9-10; paraphysibus numerosis, filiformibus, hyalinis, ramosis, septatis, quandoque supra globoso-incrassatis.

Hab. in ligno denudato *Rhamni Frangulæ* prope Rathe-now Germaniæ.

16. *Teichospora Mate* (Speg.) Sacc. et Trott., *Strickeria Mate* Speg., 4813
An. Mus. Nac. Buenos Aires t. XVII (1908) p. 127. — Peritheciis subhemisphæricis sparsis v. sæpe subseriatis 150-180 μ . diam. per ætatem sæpe subcollabescentibus vix papillato-ostiolatis, basi leniter matrice infusata insculptis, non v. vix subciligigeris; ascis cylindraceis brevissime pedicellatis, octosporis, 90-100 \times 9-10, paraphysibus filiformibus densis obvallatis; sporidiis elongato-ellipsoideis non v. vix subobovatis, 3-septatis, leniter constrictis, lo-

culis duobus internis quandoque septo longitudinali divisus, olivaceis, 13-19 \times 7-8.

Hab. in superficie interna truncorum cariosorum *Ilicis* paraguariensis (vulgo *Mate*) in silva secus Matto Queimado Rep. Argentinae Amer. austr. — Memorana ascorum Jodi ope leniter cærulescit.

17. **Teichospora fodiens** Karst. et Malbr. in Le Breton et Riel in 4314
Bull. Soc. Amis S. N. Rouen (1893) p. 154, t. I, f. 5 (extr.). — Peritheciis confertis v. aggregatis, ligno adnatis corticeque initio velatis, dein eo secedente liberis, sphæroideis v. mutua pressione difformibus, rarius papillatis, dein poro pertusis, non collabescentibus, atris, opacis, levibus, circ. 300 μ . diam.; ascis crasse cylindraceis, brevissime noduloso-stipitatis, octosporis, paraphysatis; sporidiis oblique monostichis, ellipsoideo-oblongis, 3-septatis ad septa levissime constrictis, 18-21 \times 6-6,5, loculo secundo subinde quoque tertio septulo long. diviso, dilute luteolis.

Hab. ad ramulos aridos *Salicis* sp. pr. Quevilly pr. Rouen Galliae (Reliq. ab. LETENDRE).

18. **Teichospora trabicola** Fuck. — Syll. II, p. 292. — * **T. Notarisii** 4315
Sacc. et Trav. in Saccardo, Not. Myc. VI, Ann. Mycol. III (1905) p. 511. — Peritheciis sparsis v. approximatis e basi adnata superficialibus, globulosis, $\frac{1}{4}$ mm. demum collabescendo leviter concavis, levibus, nigris, carbonaceis, ostiolo minute papillato, perforato; ascis tereti-clavatis, breve crassiuscule stipitatis, octosporis, filiformi-paraphysatis, 50-70 \times 13-14; sporidiis monostichis v. imperfecte distichis, oblongo-ovoideis, utrinque rotundatis, constricto 3-septatis, loculis 1-2 longitrorsum partitis, fusco-olivascensibus.

Hab. in ligno quercino putri, Mediolani Ital. bor. (DE NOTARIS herb. c. icon. in Instituto bot. romano). — A typo differt peritheciis demum collabenti-depressis, sporidiis paullo longioribus, ascis paullo brevioribus et crassioribus.

PLEOSPHÆRIA Speg. — Syll. II p. 304, IX p. 910, XI p. 347, XIV p. 606, XVII p. 763.

1. **Pleosphæria silvicola** v. Höhnelt, Fragm. z. Mykol. Sitzb. k. Ak. d. 4316
Wiss. Wien Bd. CXVI, Abt. I (1907) p. 122. — Peritheciis globosis, superficialibus, nigris, tenuiter membranaceo-carbonaceis, sparsis, 200-260 μ . diam., setulis nigris, acutis, rigidis, non v. indistincte septatis 40-70 \times 4 obsitis; paraphysibus paucis; ascis cylindraceis v. clavatis, octosporis, 100 \times 10-16; sporidiis monostichis v. sub-

distichis, ellipsoideis utrinque subangustatis rotundatisque brunneo-olivaceis, transversè 5-8-septatis, 1-2-longitudinaliter sed incomplete septatis, 17-20 \approx 8-9.

Hab. in ligno fagineo putri prope Pressbaum Austriæ inf.

- *P. quercinæ* Pat. et *P. pulveraceæ* Mouton affinis.

2. *Pleosphæria Fairmaniana* Saccardo, New Fungi New Y., in Journ. 4317 of Myc. XIII (1907) p. 45. — Peritheciis laxè gregariis v. subsparsis, superficialibus, globosis, nigris, membranaceo-carbonaceis, 250-280 μ . diam., vertice rotundatis, non papillatis, utique laxè setulosis; setulis filiformibus, obtusulis, indistincte septulatis, fuliginèis, 85-100 \approx 5-6, in fasciculos rigidulos junctis; ascis cylindraceis, octosporis, 100-120 \approx 12, indistincte paraphysatis; sporidiis oblique monostichis, oblongo-ovoideis, sursum crassioribus, 3-septatis (rarius 4-septatis), medio constrictis, parce muriformibus, 19-23 \approx 7,5-9, olivaceo-fuscis.

Hab. in ligno carioso indurato Ulmi americanæ, Lyndonville, New York (C. E. FAIRMAN). — Præcipue *Pleosph. quercinæ* Pat. boreali-africanæ affinis, a qua differt ascis cylindraceis nec clavatis, setulis perithecii fasciculatis, etc.

3. *Pleosphæria malacoderma* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. 4318 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 121. — Peritheciis superficialibus, gregariis, globosis, nigris, 140-200 μ . diam., membrana tenuissima, pellucide nigrescenti, fumoso-grisea, parenchymatica, basi hyphis pallide brunneis, septatis, 2 μ . cr. præditis, ceterum setulis nigris, unilocularibus, acutis, 45-60 \approx 2-5; ascis aparaphysatis, parvis, forma variabilibus, plerumque irregulariter clavato-ovoideis, basi stipitiformi angustatis, 55-66 \approx 26-29 octosporis; sporidiis confertis, olivaceis demum griseo-brunneolis, pellucidis, uno latere rotundato-angulosis, altero ovoideis, multilocularibus, 7-9 transverse septatis et nonnullis septis longitudinalibus præditis, 16-18 \approx 10-12.

Hab. in Polyporo noduloso, Wienerwalde Austriæ inferioris.

4. *Pleosphæria Mølleriellæ* (Rick) Sacc. et Trott., *Acanthostigma Mølleriellæ* Rick, Broteria V (1906) p. 45. — Peritheciis superficialibus, in stromate *Mølleriellæ* gregariis, 50-100 μ . diam., sphaericis; spinulis usque ad 20 μ . longis; ascis primo oblongo-ovalibus, dein orbiformibus, breviter pedicellatis parte sporifera 40 \approx 10, octosporis; sporidiis conglobatis, multiserialibus, primitus hyalinis, dein flavo-brunneis, cylindricis, 3-4-septatis, uno septo longitudi-

nali muriformibus, 12×6 ; paraphysibus filiformibus, ascum obtegentibus et incurvatis, $1-2 \mu$. latis.

Hab. parasitica in stromate Møelleriellæ nutantis Rick, Rio Grande do Sul Brasilæ. — Ob sporidia muriformia non *Acanthostigma* sed potius *Pleosphaeria*.

CUCURBITARIA Gray — Syll. II p. 307, IX p. 915, XI p. 348, XIV p. 607, XVII p. 764.

1. **Cucurbitaria erratica** Peck, Bull. Torr. Bot. Club XXXIV (1907) 4320 p. 349. — Peritheciis cæspitosis, subglobosis, plus minusve pilosis, nigris, in cortice immersis cæspitulos orbiculares v. oblongos efformantibus, mox erumpentibus et epidermide rupta cinctis; ascis cylindraceis, $200 \times 20-22$; sporidiis plerumque monostichis, oblongis, coloratis, 5-7-septatis, 1-3 loculis longitudinaliter divis, medio constrictis, $30-40 \times 15-20$, medietate basali sporarum magis angustiore quam altera; paraphysibus nullis.

Hab. in ramis siccis Æsculi glabræ, Oberlin Ohio Amer. bor. (F. O. GROVER). — Differt a ceteris spec. gen. *Cucurbitaria* peritheciis pilosis et paraphysibus nullis. hinc rectius genus novum (*Peckiomycetes*).

2. **Cucurbitaria Pteleæ** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4321 p. 331. — Peritheciis stromate nigro-brunneo insidentibus, erumpenti-superficialibus, dense gregariis, depresso-globosis, brunneo-nigris, granuloso-corrugatis, c. 0,5 mm. diam., ostiolo minuto papillato umbilicato; ascis cylindraceis, apice rotundatis, breviter stipitatis, 6-8-sporis, $200-245 \times 14$; paraphysibus filiformibus; sporidiis monostichis, oblongo-ellipsoideis, transverse 3-5-septatis, medio constrictis, loculo uno v. altero, rarius omnibus longitudinaliter divis, olivaceis $20-32 \times 10-12$.

Hab. in ramis siccis Pteleæ trifoliatæ, Nagy-Körös Hungariæ.

3. **Cucurbitaria adesmicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4322 (1909) p. 398. — Ramis infectis immutatis corticatis; peritheciis peridermio innatis per epidermidem erumpentibus constipatis globosis, $150-250 \mu$. diam., papillato-ostiolutis, carbonaceis; ascis subcylindraceis deorsum sensim cuneato-pedicellatis, $110-135 \times 20$, parce paraphysatis, octosporis; sporidiis subdistichis v. oblique monostichis, ellipsoideis, 3-5-septato-constrictis, $25-26 \times 12$, septo longitudinali fere semper donatis.

Hab. ad ramos languidos v. emortuos Adesmiæ pinifoliæ

in summis montibus Cacheuta prope Mendoza Rep. Argentina Amer. austr.

4. *Cucurbitaria Piceæ* Borthwick in Notes Roy. Bot. Gard. Edinburgh, XX (1909) p. 259, tab. 50. — Mycelio intercellulari; peritheciis arcte gregariis globoso-obovatis, obtusis, in stromate effuso breve crasseque stipitatis, carbonaceis, nigris; excipulo pseudo-parenchymatico extus denso, nigro, intus spongioso brunneo; ascis clavato-cylindræis, filiformi-paraphysatis, 4-6-sporis; sporidiis monostichis, cymbiformibus, 4-10-septato-muriformibus, atrobrunneis, $20 \approx 6$.

Hab. in gemmis, quas maxime vexat, Abietis (Piceæ) pungentis cultæ in horto botanico Edinburgh Scotiæ. — Cum *Cucurbitaria pityophila* comparanda, quæ imprimis sporidiis parcius septatis differre videtur.

Sect. 10. Scolecosporæ.

CEUTHOCARPON Karst. — Syll. II p. 157, XIV p. 618, XVI p. 557.

1. *Ceuthocarbon sphærelloides* Rehm, Ann. Mycol. VI (1908) p. 322. 4324
— Peritheciis in maculis denigratis, suborbicularibus, 2-3 mm. latis, epiphyllis gregariis, innato-prominentibus, globosis, nigris, ostiolo vix conspicuo, contextu parenchymatico fusco, 0,15-0,2 mm. diam.; ascis cylindræis, apice rotundatis, octosporis, $75-90 \approx 8-9$; sporidiis filiformibus, rectis vel subcurvatis, hyalinis, 3-septatis, $45-50 \approx 2,5$, parallele positis; paraphysibus nullis.

Hab. ad folia Rosæ in horto, Rathen prope Königstein a. Elbe Germaniæ (W. KRIEGER). — Stromatis et ostioli defectu a gen. *Linospora* distinguendum.

OPHIOSPHERIA Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906)

p. 47 (Etym. *ophis* anguis et *sphæria* ob sporidia filiformia). — Perithecia libera, parva, parum elongata, subglobosa, tenui-membranacea, griseo-nigra, plerumque in greges late effusos aggregata, supra pilis firmis tecta. Asci tenui-tunicatis, cylindræi, supra rotundati, octospori. Sporidia filiformia guttulata unilocularia. — A *Niesslia* differt sporidiis filiformibus unilocularibus.

1. *Ophiosphæria tenella* Kirschst. l. c. p. 47, cum icon. — Peritheciis laxè insidentibus, parvis, setulis $200 \approx 5$; ostiolo indistincto;

Syll. fung. XXII (VII-1912)

ascis cylindraceis, sessilibus, octosporis, 130-160 \times 7-9; sporidiis inter se spiraliter connexis, hyalinis 1,5-2 μ . cr. primum guttulis; paraphysibus filiformibus hyalinis.

Hab. in foliis putrescentibus *Glyceriæ spectabilis* et *Caricis ripariæ*, prope Gross-Behnitz et Rathenow Germaniæ.

OPHIOSPHERELLA Speg., An. Mus. Nac. Buenos Aires, t. XIX (1909) p. 401 (Etym. *ophis* anguis quasi *Sphaerella* scolecospora). — Perithecia innata, globoso-lenticularia, minuta, submembranacea, poro pertusa. Asci paraphysati, octospori. Sporidia filiformia, hyalina v. chlorina ascum subæquantia. — Est *Sphaerella* scolecospora.

1. *Ophiosphærella graminicola* Speg., An. Mus. Nac. Buenos Aires 4826 t. XIX (1909) pag. 401, cum icon. — Maculis nullis sed matrice tota arescenti-pallescente; peritheciis parenchymate innatis laxè gregariis submembranaceis, lenticularibus 180-200 μ . diam.; ascis cylindraceis utrinque leniter attenuatis basi brevissime cuneato-pedicellatis, 150 \times 10, paraphysatis, octosporis; sporidiis filiformibus rectis, multiguttulatis, chlorinis, 140 \times 3.

Hab. ad vaginas aridas *Leptochloæ virgatæ* in hortis pr. Tucumán, Rep. Argentina Amer. austr.

PHYSALOSPORELLA Speg., Fungi Chilenses (1910) pag. 35 (Etym. demin. a *Physalospora*). — Perithecia macula stromatica determinata setulifera immersa, pauci-gregaria, minuta; asci cylindracei octospori, paraphysati; sporidia subacicularia, continua, hyalina.

1. *Physalosporaella chilensis* Speg., l. c. cum icon. — Stromatibus 4827 primo setuliferis dein glabratis, minutis amphigenis; peritheciis sæpius vix prominulis amphigenis 120-150 μ . diam.; ascis subcylindraceis 75-80 \times 6-7, octosporis; paraphysibus frequenter furcatis; sporidiis subbacillaribus utrinque angustatis, minute guttulis, 18-20 \times 2,5-3.

Hab. in foliis dejectis putrescentibus præcipue *Perseæ Lingue*, Cerro Caracol de Concepcion Chile, Amer. austr.

ACERBIA Sacc. — Syll. XI p. 353, XIV p. 619, XVII p. 768.

1. *Acerbia botryosa* Rehm, Ann. Mycol. VII (1909) p. 537. — Peritheciis in soros orbiculares 3-5 mm. diam., demum confluentibus arete congregatis, sessilibus, globosis, in rostrum breviter conoidæum, obtusum abeuntibus, glabris, ad basim hyphis fuscis, septatis, longis, 5 μ .r. obsessis, carbonaceis, 0,3 mm. diam., fusco-atris, 4828

verruculosis; ascis tenerrimis, cylindraceo-fusoideis, $80-90 \times 7$, 4-sporis, l.-; sporidiis filiformibus, utrinque acutatis, rectis, pluriguttulatis, hyalinis, usque ad 65×2 , parallele positis; paraphysibus tenerrimis, ramulosis.

Hab. ad ramulum? Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.) — Gen. *Ophiocerati* proxima sed rostro parvo diversa; an potius ad *Leptosporellam* pertineat incertum. Forsan in nov. gen. erigenda, cui nomen *Scolecobotrys* cl. Rehm proponit.

ACERBIELLA Sacc. — Syll. XVII p. 768.

1. *Acerbiella aquilæformis* Rehm, Ann. Mycol. V (1907) p. 529. — 4829

Peritheciis gregariis, late sessilibus, globulosis, apice truncatis, sæpe orbiculariter circumscriptis, planis, medio in papillulam conoideam brevem, poro pertusam abeuntibus, 1-2,5 mm. diam., crasse carbonaceis, in parte inferiore usque ad planitiem superiorem fusco-atris, hyphis plerumque rectis, parallelis, septatis, subfuscis, prælongis, 3 μ . cr., sæpe in fasciculos 50 μ . crassos coalitis obsessis, inde tegumento subfusco mycelii instar conjunctis, parte superiore perithecii plerumque applanata, rarius convexula, atrimis, glabris; ascis fusiformi-cylindraceis, longe stipitatis 600×12 , tetrasporis, apice rotundatis incrassatisque; sporidiis filiformibus, obtusis, pluries septatis, quaque cellula guttulis 2 oleosis prædita, fuscidulis, c. 300×4 , in asco parallele spiraliter circumvolutis; paraphysibus filiformibus, hyalinis, septatis, 3-4 μ . cr.

Hab. ad truncos, Sao Leopoldo, Rio Grande do Sul, Brasiliæ (RICK). — Habitus omnino *Rosellinice aquilæ* sed fructificatio prorsus aliena. *Acerbiella macrospora* partibus omnibus minoribus mox recedit.

2. *Acerbiella violacea* (Racib.) Sacc. et Trott., *Acanthostigma viola* 4880

ceum Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 335. — Plagulis hypophyllis violaceis 0,5-1,5 cm. latis; hyphis violaceo-brunneis, multiseptatis, ramosis, 1,5-2,5 μ . cr., hyphopodiis v. setulis nullis; peritheciis numerosissimis, globosis, sessilibus, 220-260 μ . diam., minute papillato-ostiolatis, pilis violaceo-cupreis, deflexis 50-80 μ . long. tectis; parietibus tenuibus, brunneis, mollibus; paraphysibus filiformibus; ascis cylindraceis, octosporis, $74-80 \times 9-11$; sporidiis subparallelis, linearibus, obscure nigris, multiseptatis, $50-60 \times 1,5$.

Hab. parasitice in plagulis Meliolarum ad folia *Jambosæ* sp. Djasingo prope Buitenzorg Java. — Ob sporidia prælonga et

nigricantia ab *Acanthostigmatæ* omnino recedit; potius *Acerbiellæ* proxima

BOMBARDIELLA v. Höhn. Fragm. Myk. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1192 (Etym. a gen. *Bombardia*, cui affinis). — Perithecia plerumque gregatim effusa in hypostromate tenui, pallido, superficiali insidentia, nigra, glabra, mollia, carnosio-membranacea, late ostiolata; pariete perithecii crasso tristratoso, strato medio hyalino, ceteris obscuris, parenchymaticis; asci octospori cylindracei, tenuiter tunicati; paraphysibus filiformibus; sporidia hyalina, filiformia, plurilocularia.

1. *Bombardiella cæspitosa* v. Höhn., l. c. pag. 1192. — Peritheciis pauci-gregariis, plerumque longitudinaliter dispositis, hypothallo molli pallido minute celluloso plectenchymatico, 20-30 μ . cr., carnosio-membranaceis, levibus, glabris, globosis, subpatelloideis, 400-450 μ . latis et altis, pariete, perithecii basi 35-60 μ . cr. apicem versus usque ad 130 μ . cr., ostiolo 45-52 μ . lato aperto, tristratoso; paraphysibus numerosis, tenuiter tunicatis, non septatis, minute guttulatis, 3-6 μ . cr., laxis; ascis cylindraceo-clavatis, supra rotundatis, tenuiter tunicatis, basim versus conoideo-angustatis, 136-170 \times 12-16, octosporis; sporidiis parallelis, cylindraceo-filiformibus utrinque angustato-acutatis, supra sæpe paullo latioribus, contentu nitido homogeneo, 14-15-septatis, hyalinis v. flavidulis, 120-124 \times 3,5-4,5.

Hab. in ramis putrescentibus *Amomi* sp. in silvis Tjibodas ins. Java.

LEPTOSPORA Fuck. — Sacc. Syll. II p. 198 (ut subgen.).

1. *Leptospora stictochætophora* Fairm., Proc. Rochester Ac. of Sc. IV (1906) p. 218, tab. XX, fig. 5-6. — Peritheciis sparsis vel gregariis; parvis, setulis obsitis, primum pallide brunneis dein obscurioribus; setulis acutis, canaliculatis, subcompositis, 150-250 \times 7-13; ascis late fusoideo-oblongis, octosporis, breviter stipitatis, 80-90 \times 10-13; paraphysibus vix distinctis, albis; sporidiis irregulariter distichis, rectis v. curvis, cylindraceis v. allantoideis, utrinque rotundatis, guttula magna oblongo-ellipsoidea præditis, hyalinis, 20-27 \times 4-6.

Hab. ad ramos decorticatós *Aceris* sp., Lyndonville New York Amer. bor.

2. *Leptospora sparsa* Sacc. et Fairm. in Saccardo, Microm. Amer. 4833

novi, Journ. of Myc. v. XII (1906) p. 49. — Peritheciis superficialibus, sparsis, globulosis, carbonaceis, nigris, glabris, 300-400 μ . diam., breviter obtusule papillatis; ascis elongato-cylindraceis basi sensim tenuato-substipitatis, 112-120 \times 8-9, octosporis, apice paullulum tenuatis rotundatisque; sporidiis distichis, cylindraceis, sursum curvatis, 33 \times 4, continuis, hyalinis; eguttulatis.

Hab. ad ligna putrida in silvis pr. Lyndonville, New York Amer. bor. — Peritheciis laxè sparsis, glabris, minoribus, non pachydermaticis, sporidiis non nucleatis etc., a *Lept. spermoide* aliisque distinguenda species.

3. *Leptospora spermoides* (Hoffm.) Fuck. — Syll. II, p. 198 (*Lasio- 4334*
sphaeria) — var. *rugulosa* Bres. in Rick, Fungi austro-amer. II, Ann. Myc. v. III (1905) p. 17, Broteria V (1906) p. 45; Exsicc. n. 41. — A typo differt peritheciis grosse rugulosis, ascis fusoides et sporidiis demum olivaceis, 1-3-septatis.

Hab. ad ligna in Brasilia.

Appendix: Sphaeriaceæ fossiles.

Sphaerites Buxi (Engelh.) Sacc. et Trott., *Sphaeria Buxi* Engelh. 4335
Abhandl. Senckenb. nat. Ges. XXIX (1903).

Hab. in pliocæne super. in Germania.

Sphaerites carbonarius Schuster, Geogr. Jahreshfte, XX (1907). 4336

Hab. ad folia Cordaitis borassifolii in formatione carbonifera in Germania.

Fam. 3. Ceratostomataceæ WINT.

Sect. 1. Hyalosporæ.

CERATOSTOMELLA Sacc. — Syll. I p. 408, IX p. 573, XI p. 289, XIV p. 515, XVII p. 609. — Comparandæ sunt inter se species a cl. Münch ex Germania et a cl. Hedgcock ex America descriptæ.

1. *Ceratostomella Pini* Münch, Naturw. Ztsch. f. Land. u. Forst- 4337
wirtsch. V (1907) p. 531, cum icon. — Peritheciis subcorticolis et ex ligno decorticato cyaneo-colorato erumpentibus, 70-100 μ . diam., levibus, rostello longo præditis; ascis globosis denique ex ostiolo fimbriato in massulas eructatis, continuis, 5 \times 1.5, curvulis, hyalinis.

Hab. in ligno cyaneo colorato pineo in Germania. — Status conidiophorus adest et *Cladosporii* spec. sistit: hyphis 20-50 fasciculatis, conidia hyalina continua 4-5 \times 1,5 gerentibus. Species hæc *Ceratostomellæ* nec non sequentes a Cl. Münch descriptæ et ex cultura eductæ, ex *Cerat. pilifera* (Fries) Fuck. sensu lato oriuntur.

2. *Ceratostomella Piceæ* Münch, Naturw. Ztschr. f. Land. u. Forst- 4338
wirtsch. V (1907) p. 531, cum icon. — Peritheciis nigris, carbonaceis, globosis, subdepressis, quandoque leniter pilosis, 160-240 μ . diam. et rostello 0,8-1,2 mm. longo, 20-30 μ . cr., irregulariter incurvato præditis; sporidiis ex rostelli apice fimbriato 20-50 μ . long., in massulas mucosas congregatis, cylindraceis utrinque rotundatis leviter curvulis, hyalinis, 3,5-4,5 \times 1,5-2; ascis 5-6 μ . latis.

Hab. in ligno abietino putri, in Germania. — Socius adest status conidicus *Graphium* sistens (capitulo conidia 3,5-4 \times 1,7 hyalina exerente) nec non *Cladosporii* forma fasciculata, conidia 6-8 μ . longa gerens.

3. *Ceratostomella cana* Münch, Naturw. Ztschr. f. Land. u. Forst- 4339
wirtsch. V (1907) p. 531, cum icon. — Peritheciis circ. 1 mm. long., 0,5 mm. crassis; statu conidico (*Graphium*) ab illo *Cerat. Piceæ* diverso.

Hab. in ligno pineo putri quod cyaneum reddit, in Lotharingia.

4. *Ceratostomella cærulea* Münch, Naturw. Ztschr. f. Land. u. Forst- 4340
wirtsch. V (1907) p. 531, cum icon. — Peritheciis ut in *C. Piceæ* sed mycelium et status conidiales diversa; hyphis mycelialibus mox obscuris, forma *Graphii* nulla, sed *Cladosporii* conidia 15-20 \times 3-3,5 v. conidia spicata.

Hab. in ligno pineo putri, quod cyaneum reddit, in Germania.

5. *Ceratostomella cyclospora* Kirschst., Verh. Bot. Ver. Brandenb. 4341
XLVIII (1906) p. 52. — Peritheciis solitariis v. congregatis in ligno denudato v. in cortice immersis, nigris, globosis, carbonaceis, granuloso-rugulosis, usque ad 1 mm. diam., rostello elongato sæpe tuberculoso et ostiolo umbilicato-depresso prædito; ascis cylindraceo-clavatis, tenuato-pedicellatis, crasse tunicatis, fragilibus, 30-40 \times 4-6, facile diffluentibus, octosporis; sporidiis monostichis v. irregulariter dispositis, hyalinis, cylindraceis, semilunatis v. plerumque fere circulariter incurvatis, circ. 4 μ . diam.; paraphysibus numerosis, ascos longe superantibus, filiformibus, hyalinis, 2 μ . crassis.

Hab. in ligno pineo putri in silvis prope Rathenow, Germania.

6. *Ceratostomella Schrenkiana* Hedgecock, 17th Ann. Rep. Miss. bot. 4342

Gard. St. Louis (1906) p. 67, cum icon. et tab. 3, fig. 6, tab. 4, fig. 1-4. — Peritheciis sphaericis, nigris 120-200 μ . diam., ostiolo rostellato glabro 0,8-1,2 mm. longo, 10-25 μ . diam., apice setulis brevibus 10-15 \times 2 hyalinis divergentibus coronato; ascis . . . ; sporidiis ellipsoideis sæpe curvulis utrinque acutiusculis 2,5-4 \times 1-1,5, hyalinis; conidiis in formam *Cephalosporii* digestis, ovato-cylindraceis, hyalinis, 5-7.

Hab. in ligno, quod cyaneo tingit, Pini echinatae, Missouri et Arkansas Amer. bor. — Mycelium peculiare dendroideo-ramosum. Cfr. ejus ic. loc. cit. p. 68. — Ab affini *C. echinella* differt peritheciis superficialibus et apice non glanduloso-pubescentibus

7. *Ceratostomella capillifera* Hedgecock, 17th Ann. Rep. Miss. bot. 4343

Gard. St. Louis (1906) p. 71, pl. 3, fig. 1, pl. 6, fig. 2. — Peritheciis sphaeroideis, nigris, longe rostellatis et filamento hyalino undulato terminatis, basi hyphis v. pilis obscure brunneis tecta, 200 μ . circ. diam., rostello 1,5 mm. longo, 25 μ . cr., setulis terminalibus longis et angustis, 80 \times 1; ascis . . . ; sporidiis ex ellipsoideo reniformibus 4,5 \times 1,5; conidiis in formam *Cephalosporii* digestis, 6-8 \times 1,5-2, hyalinis.

Hab. in ligno, quod cyaneo tingit, Liquidambaris styracifluæ in Amer. bor. — Ab affini *Cerat. pilifera* differt longitudine rostellii, forma et magnitudine conidiorum sporidiorumque.

8. *Ceratostomella pluriannulata* Hedgecock, 17th Ann. Rep. Miss. bot. 4344

Gard. St. Louis (1906) p. 72, pl. 3, fig. 7, pl. 5, fig. 1-2. — Peritheciis ligno v. mycelio superficialibus, globosis 90-200 μ . diam., plerumque circ. 120 μ ., rostello 0,9-2 mm. longo, 10-30 μ . cr., plerumque 1,5 mm. longo, 25 μ . cr.; setulis terminalibus attenuatis 20 \times 2; ascis . . . ; sporidiis reniformibus, hyalinis, 4-5 \times 1,5-1,7, plerumque 4,5 \times 1,5; conidiis in formam *Cephalosporii* digestis, 5-8 \times 2-3, hyalinis.

Hab. in ligno, quod cyaneo tingit, Quercus rubrae, Mississipi Amer. bor. (PERL. SPAULDING). — Rostella apice regulariter fimbriata sed sæpe anulo altero setularum v. duobus a primo plus minus remotis prædita. Ab affini *Cer. pilifera* differt sporidiis minoribus et rostello pluriannulato.

9. *Ceratostomella minor* Hedgecock, 17th Ann. Rep. Miss. bot. Gard. 4345

St. Louis (1906) p. 74, pl. 3, fig. 4, pl. 5, fig. 6-7. — Peritheciis

sphæroideis, nigris, rugosis, 40-70 μ . diam., plerumque 52 μ ., rostellum 120-160 μ . longo, plerumque 135 μ ., 6-12 μ . cr., apice setulis brevibus crassiusculis prædito; ascis e rotundato ovoideis, hyalinis, octosporis; sporidiis in duas tetrades dispositis $3,1-4,2 \approx 0,9-1,9$, plerumque $3,5 \approx 1,5$, hyalinis; conidiis in formam *Cephalosporii* digestis, ovoideo-oblongis, hyalinis, $4,5 \approx 2$.

Hab. in ligno quod cyaneo tingit in Pini arizonicæ, Amer. bor. A. D. HOPKINS). — *Cer. exigua* affinis sed compluribus notis diversa.

10. *Ceratostomella exigua* Hedgcock, 17th Ann. Rep. Miss. bot. Gard. 4846 St. Louis (1906) p. 76, pl. 3, fig. 2, pl. 6, fig. 4-7. — Peritheciis globosis, nigris, fragilibus, rugulosis, 60-80 μ . diam., plerumque 73 μ .; rostellum 150-200 μ . longo, 8-18 μ . cr., plerumque $180 \approx 14$, apice setulis brevibus angustis prædito; ascis hyalinis irregulariter ex ovoideo ellipsoideis, octosporis; sporidiis sæpe in duas tetrades dispositis, hyalinis, ellipsoideis, quandoque curvulis $2,1-2,8 \approx 0,8-1,1$, plerumque $2,5 \approx 1$; conidiis in formam ferè *Cephalosporii* digestis, hyalinis, $3,5-4,5 \approx 1,6-2,2$.

Hab. in ligno, quod cyaneo tingit, Pini virginianæ in Amer. bor. (A. D. HOPKINS). — Ab affini *C. microspora* E. et E. differt forma sporidiorum, magnitudine perithecorum et rostellum, A. C. minore differt peritheciis majoribus, nec non numero, forma et magnitudine setularum.

11. *Ceratostomella moniliformis* Hedgcock, 17th Ann. Rep. Miss. bot. Gard. 4847 St. Louis (1906) p. 78, pl. 3, fig. 5, pl. 5, fig. 3-4. — Peritheciis e brunneo nigris, 90-180 μ . diam., spinulis conoideis $12-16 \approx 6$ tectis; rostellum e brunneo nigro, apice setulis hyalinis $12-18 \approx 2$ prædito; ascis evanidis hyalinis, ovoideis, circ. $20 \approx 10$; sporidiis hyalinis, non guttulatis, ovoideis, sæpe uno latere depressis, $4-5 \approx 3-4$; conidiis moniliformiter digestis (*Cylindrii* ad instar) breviter cylindraceis, $6-8 \approx 1,5-2,2$, ex hyphis simplicibus enascentibus, ex albo cinereis.

Hab. in ligno, quod cyaneo tingit, Liquidambaris styracifluæ, prope Kirbyville Texas Amer. bor. (V. SCHRENK). — *C. piliferæ* affinis.

12. *Ceratostomella fusco-lutea* Rehm, Ann. Mycol. VI (1908) p. 320. 4848 — Peritheciis dispersis, ligno immersis, circa rostrum fusco-luteo-tincto, globosis, nigris, contextu parenchymatico, hyphis creberrimis, simplicibus, plerumque rectis, septatis, c. $200 \approx 3$, per ligni fibras currentibus obsessis, 0,5 mm. diam., rostro glabro, ob-

tuso, nigro, c. 0,4-0,5 mm. longo prominente; ascis cylindraceutis, 90-100 \times 8-10, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttam oleosam magnam includentibus, hyalinis, 12 \times 5, 1- rarius superne 2-stichis; paraphysibus filiformibus 4-5 μ . cr., septatis, hyalinis.

Hab. in ligno decorticato fagineo, in faucibus montis Hochgrad Algoviae (BRITZELMAYER). — A *Ceratostomella cirrosa* sporidiis diversissimis mox dignoscenda.

13. *Ceratostomella bambusina* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4349 CXVIII, Abt. I (1909) p. 337. — Peritheciis erumpenti-superficialibus, gregarie sparsis, nigris, carbonaceis, fragilibus, globosis, 230-240 μ . diam., rostello erumpente, usque ad 600 μ . longo, supra 60 basi 80 μ . cr., curvulo, hyphis septatis, obscure rubro-brunneis, levibus, 2-4 μ . cr., laxis tecto; paraphysibus crassiuscule filiformibus, indistinctis; ascis sessilibus, tenuissime tunicatis, cylindraceutis, 32 \times 3, octosporis; sporidiis monostichis, hyalinis, globosis, uniguttulatis, 2,5-3,5 μ . diam.

Hab. in culmis putrescentibus Bambusæ Tjibodas in insula Java. — *Cer. sphærospermæ* Fuck. affinis.

14. *Ceratostomella mycophila* Rick, Broteria V (1906) pag. 48. — 4350 Stromate nullo; peritheciis in *Poria* quadam lignosa brunnea nidulantibus, $\frac{1}{8}$ mm. latis, ostiolum cylindricum atrum, 1 mm. altum $\frac{1}{8}$ mm. latum emittentibus, inter se liberis sed aggregatis; ascis sessilibus, paraphysatis, 25 \times 6; sporidiis biserialibus, cylindricis 5 \times 2, subflavidulis.

Hab. in *Poria* sp., Rio Grande do Sul Brasiliæ. — Species præclara vegetatione epipolyporea et defectu paraphysium distincta. Stroma nullum adest hinc ad *Valsam*, cui in ceteris satisfacit, duci nequit. An *Valsa* ob singularem habitationem astromatica evasa? Gen. *Massalongiella* caret ostiolo elongato, quare neque bene ad hoc genus species nostra ducenda.

ENDOCONIDIOPHORA Münch, Naturw. Ztschr. f. Land.-u. Forstwirtschaft.

V (1907) pag. 531 (Etym. ex statu conidico endosporo). — Perithecia ligni stratu brunneo (an potius cyaneo?) omnino immersa; contextu ex hyphis brunneis 200 \times 4-6 constituto; hyphis angulo recto surgentibus et ex interiore apicis conidia cylindrica hyalina 4-5,5 μ . long. biguttulata, emittentibus (*Chalara Unger* Sacc.).

1. *Endoconidiophora cærulescens* Münch, l. c. p. 531, cum icon. — 4351 Peritheciis carbonaceis, ligno immersis, globosis, subdepressis, 160-

240 μ . diam., rostello usque ad 800 μ . longo, præditis, pilis conspersis; sporidiis 6-8 \times 2, in apice rostelli in massulas congregatis.

Hab. in ligno pineo cyaneo tincto putri in Germania.

GNOMONIELLA Sacc. — Syll. I p. 413, IX p. 575, XI p. 289.

1. *Gnomoniella Catappæ* Koord., Botan. Untersuch. (1907) p. 192, 4852

fig. 19 I. — Maculis magnis, indeterminatis, arescendo fuscis; peritheciis stromate destitutis, tectis, coriaceis, nigris, globosis, 0,9 mm. diam., ostiolo cylindraceo 250-260 μ . longo, epidermidem perforante; ascis cylindraceis, 28-30 \times 5-6, apice incrassatis et poro pertusis, 8-sporis; sporidiis hyalinis, elliptico-oblongis, utrinque subacutis, 10-11 \times 2,5-3, continuis, biseriatis, rectis v. curvulis.

Hab. in foliis *Terminaliæ Catappæ* prope Purworedjo, Java (KOORDERS).

Sect. 2. Phæosporæ.

CRYPTOASCUS Petri, Oss. sopra alcune malattie d. Olivo in. Rend.

Accad. Linc. (1907) p. 642 (Etym. *cryptos* abditus, et *ascus*). — Perithecia superficialia, simplicia, fragilia, atra, carbonacea, collo plus minusve elongato instructa, glabra, basi radicata; asci globulosi, sine ordine dispositi, monospori, gelatinosi, mox evanidi; sporidia ovoidea, atra, bitunicata.

1. *Cryptoascus oligosporus* Petri, l. c. cum icon. — Peritheciis irre- 4853

gulariter excipuliformibus, nigris, carbonaceis, collo plerumque elongato, basi hyphis nigris instructis, 100-215 \times 60-90; excipulo pseudoparenchymatico; ascis globosis, gelatinosis, hyalinis, 30-40 \times 15-20; sporidiis paucis, crassis, levibus, ovoideis, tunica fuliginea opaca obovolutis, 27-33 \times 15-18.

Hab. in radicibus *Oleæ europææ* in Italiæ centrali et meridionali.

CERATOSTOMA (Fr.) Sacc. — Syll. I p. 215, IX p. 481, XI p. 278,

XIV p. 489, XVI p. 427, XVII p. 609.

1. *Ceratostoma crassicolle* Kirschst., Verh. Bot. Ver. Brandenb. 4854

XLVIII (1906) p. 52. — Peritheciis plerumque in ligno seriatim immersis, sed collo crasso et ostiolo scutellato prædito tantum prominentibus, nigris, globosis, crasse membranaceis, extus pilis brevibus, brunneis, patentibus tectis, $\frac{1}{4}$ mm. circ. cr.; ascis elonga-

to-clavatis v. subcylindraceis, supra rotundatis, longe pedicellatis, octosporis, $100-200 \approx 6$ (p. sp. $40-60 \mu$. longa); sporidiis distichis v. irregulariter dispositis, nigricantibus, cylindraceis, utrinque rotundatis, unilocularibus, rectis v. curvulis, $9-12 \approx 2,5-3$; paraphysibus, numerosis, filiformibus, septatis, supra sensim acutatis, ascos superantibus, infra 3μ . cr.

Hab. ad truncos pineos putres, prope Gross-Behnitz Germaniæ.

2. *Ceratostoma Fairmani* Saccardo, Microm. Amer. novi, Journ. of 4355 Myc. v. XII (1906) p. 49. — Peritheciis late et laxè gregariis, ligno putri molli fere totis immersis, globulosis, $0,4-0,5$ mm. diam., nigris, glabris, rostellatis; rostello cylindraceo-acutiusculo, $500 \approx 100$, nitidulo, levissime longitrorsum sulcato; ascis fusoidèo-clavatis, subsessilibus, deorsum sensim tenuatis obtusisque, apice quoque leviter tenuatis obtusisque, octosporis, $19-22 \approx 8-8,5$ aparaphysatis; sporidiis oblique monostichis v. subdistichis, ellipsoideis, $7 \approx 3-3,5$, e fronte rectis, e latere curvis, olivaceis, inæqualiter 1-3-guttulatis.

Hab. in truncis putridis pr. Lyndonville, New York Amer. bor. — Affine *C. avocettæ*, a quo differt ascis subfusoidèis, aparaphysatis, sessilibus, sporidiis brevioribus, etc.

3. *Ceratostoma Usterianum* Spegazz., Fungi Paulist., Rev. Mus. La 4356 Plata t. XV (1908) p. 18. — Peritheciis superficialibus arcte matrici adnatis, subiculo fumagineo destitutis sed hyphis paucis radiantibus repentibusque hyalinis ramulosis septulatis, $50-150 \approx 2-3$ radicatis, sparsis, vix perspicuis, globoso-depressis $80-100 \mu$. diam., glabris, coriaceis, contextu indistincto, antice ostiolo recto vel leniter arcuato cylindraceo prælongo $150-400 \approx 30-35$ opaco apice non v. vix subinflato et truncato penicillato-ostiolato terminatis; ascis fasciculatis aparaphysatis, antice obtusis postice cuneato-atenuatis longiusculeque pedicellatis, p. sp. $38-50 \approx 8-10$, ped. $20-30 \approx 2-3$, octosporis; sporidiis ellipsoideis v. cymbiformibus monov. distichis, utrinque acutiusculis, $11-13 \approx 4,5-5$, plus minusve pallide fuligineis.

Hab. ad folia coriacea arboris speciei ignotæ (Myrtaceæ?) cujusdam, Pinheiros perto de Sao Paulo et Ipiranga, Cambucy Brasilæ (USTERI). — Species mirabilis cum *Capnodiopside mirabili* P. Henn. non comparanda, a genere vita biophila recedens et facile novi generis typum sistens.

ACANTHORHYNCHUS Shear, Bull. Torr. Bot. Cl. XXXIV (1907) p. 313 et Cranberry Diseas. p. 27, t. III, f. 12-22 (Etym. *acantha* spina et *rhynchos* rostrum). — Perithecia submembranacea, sparsa, infossa, rostellata; rostello acuto, ostiolato; asci octospori, paraphysati; sporidia continua, brunneo-flava.

1. **Acanthorhynchus Vaccinii** Shear, l. c. p. 314. — Peritheciis amphigenis, sparsis, subglobosis, v. subphialiformibus, submembranaceis, immersis, parum prominentibus, 120-200 μ . diam.; collo valido, exerto, ostiolato, peritheciis tertiam v. dimidiam parte attingente, rostellis nigris continuis 50-70 \times 8-9; ascis subellipsoideis v. subclavatis, subsessilibus, octosporis, apice poro apertis, 120-155 \times 22-44; paraphysibus septatis, ascos excedentibus; sporidiis oblongo-ellipsoideis, continuis, pallide brunneo-flavis, mucos mucilagineo circumdatis, 24-32 \times 12-18.

Hab. in foliis *Vaccinii macrocarpi*, West Mills, New Jersey, Nova Scotia, Massachusetts, West Virginia Amer. bor.

Sect. 3. Hyalodidymæ.

LENTOMITA Niessl. — Syll. I p. 584, IX p. 698, XIV p. 542, XVII p. 663.

1. **Lentomita brasiliensis** v. Höhnelt, Ergebn. Bot. Exp. Südbras. 1901 4358 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 24. — Peritheciis gregariis, superficialibus, globosis, carbonaceis, supra glabris, infra hyphis circumdatis, 300 μ . diam. et collo cylindraceo nigricante 300-600 μ . longo, 45-50 μ . cr., apice pallidiore et usque ad 70 μ . clavato-incrassato; pseudoparaphysibus paucis tenuibus diffluentibus, septatis, 4 μ . cr., ascos longe superantibus; ascis numerosis, clavatis, tenuiter tunicatis, supra rotundatis, basi acutatis, 50-60 \times 6-7, octosporis; sporidiis mono- v. distichis, hyalinis, ellipsoideis, extus mucosis, semper bilocularibus, ad septum non constrictis, plerumque 10 \times 3, guttulatis.

Hab. in ligno indurato, in silvaticis prope Barra Mansa, alt. 1000 m., Sao Paulo Brasiliæ.

GNOMONIA Ces. et De Not. — Syll. I p. 561, IX p. 672, XI p. 302, XVI p. 483, XVII p. 664.

1. **Gnomonia Geranii** Hollós, Ann. Mus. Nat. Hungar. VII (1909) 4359 pag. 52. — Peritheciis sparsis v. laxè gregariis, globulosis, mem-

branaceis, nigris, 350-450 μ . diam., epidermide velatis, basi siccitate excavatis, contextu parenchymatico, ostiolo cylindraceo-rostellato, 170-250 \times 50, erumpentibus; ascis clavatis, subsessilibus, 36-40 \times 6-8, paraphysatis, octosporis; sporidiis distichis v. oblique monostichis, fusoides, rectis v. curvulis, 4-guttulatis, demum tenuiter 1-3-septatis, non constrictis, hyalinis, 14-18 \times 2.

Hab. in caulibus siccis Geranii sanguinei prope Kecs-kém Hungariæ.

2. *Gnomonia tithymalina* Briard et Sacc. — Syll. IX, pag. 672. — 4360
var. *Sanguisorbæ* Rehm, Ann. myc. III (1905) p. 229. — Sporidiis rectis, oblongis, utrinque rotundatis, medio septatis, haud constrictis, quaque cellula biguttata, haud appendiculatis. 10 \times 2-2,5, distichis ascis 4-6-sporis fusiformibus sessilibus, 25-27 \times 7-8.

Hab. in caulibus et petiolis præteriti anni Sanguisorbæ officinalis, Königstein Saxonie (W. KRIEGER).

3. *Gnomonia dilacerans* Rehm, Ann. Mycol. V (1907) pag. 538. — 4361
Peritheciis gregariis, innatis, globosis, glabris, ostiolo conoideo primitus per epidermidem prorumpente, dein epidermide dilacerata denudato, sessilibus, foveolam nigram relinquentibus, 0,5 mm. diam., contextu membranaceo, parenchymatico; ascis cylindricis, longe stipitatis, p. sporif., 70 \times 7-8, octosporis; sporidiis fusoides, subobtusis, medio constrictis et septatis, utrinque 1-guttatis, hyalinis, rectis vel subcurvatis, 10-12 \times 3,5-4, monostichis; paraphysibus filiformibus, tenerrimis, septatis 3 μ . cr.

Hab. ad caules siccos Rubi Idæi in faucibus supra Razes Tirolie austr. (REHM). — A *Gnomon. depressula* sporidiis duplo amplioribus differt.

4. *Gnomonia Gei-montani* Ranojevic, Ann. Mycol. VIII (1910) p. 362. 4362
— Peritheciis sparsis, immersis, globosis, nigris, 210-500 μ . diam., rostro nigro usque ad 800 μ . longo, 38-47 μ . cr. præditis; ascis cylindrico-clavatis, elongato-fusoides, in pedicellum tenuem attenuatis, 36-53 \times 4-7,5, octosporis; sporidiis fusoides, bilocularibus, loculo inferiori angustiori, raro trilocularibus, 7,5-13,5 \times 1,5-2, hyalinis; paraphysibus nullis.

Hab. in foliis siccis Gei montani in M. Mindzur 2000 m. alt. in Serbia. — A *Gnom. Gei* rostro longiore, sporidiis fusoides inæqualiter septatis diversa.

5. *Gnomonia occulta* Kirschst., Ver. Bot. Ver. Brandenb. XLVIII 4363 (1906) p. 58. — Peritheciis hypophyllis, sparsis, nigris, minutis, tenui-membranaceis, immersis, rostello longiusculo prominentibus;

ascis cylindraceo-clavatis, quandoque fere fusioideis, supra rotundatis bifoveolatis, sessilibus, octosporis, $30-40 \times 6-7$; sporidiis distichis, hyalinis, unilocularibus, fusioideis, utrinque rotundatis vel subcylindraceis, hyalinis, minute multiguttulatis, rectis v. curvulis, demum subbilocularibus, loculo altero minore, $8-10 \times 2$; paraphysibus nullis.

Hab. in foliis emortuis *Potentillæ anserinæ*, Götting pr. Rathenow Germaniæ.

6. *Gnomonia herbicola* A. L. Smith, Trans. Brit. Mycol. Soc. III 4364 (1910) pag. 221. — Peritheciis immersis membranaceis, nigris, depressoglobosis, atro-brunneis, $200-250 \mu$. alt., $60-70 \mu$. cr.; ostiolo producto nigro; contextu peritheci e cellulis polygoniis crassiuscule tunicatis formato; ascis copiosis clavatis, fusiformibus, paraphysatis, crasse et breviter stipitatis, $25-40 \times 5-7$, octosporis; sporidiis ellipsoideo-fusiformibus continuis v. tenuiter uniseptatis, $3-4$ guttulatis, $8-12 \times 2-2.5$.

Hab. gregatim ad basim caulis viventis *Epilobii hirsuti*, Derbyshire Britannicæ.

7. *Gnomonia intermedia* Rehm, Ascom. exsicc. fasc. 42, n. 1794; 4365 Ann. Mycol. VI (1908) p. 489. — Peritheciis dispersis, plerumque folii superiore pagina innatis, globulosis, nigris, tenuissime filiformiter rostratis, $120-150 \mu$. diam., rostro glabro c. 300μ . longo, 40μ . cr., subfusco, versus apicem obtusum hyalino; ascis clavatis, teneris, $30-33 \times 8-10$, octosporis; sporidiis subconstricto-didymis, utrinque obtusis, rectis, medio septatis, utraque cellula biguttulata, haud appendiculatis, hyalinis, $8-12 \times 3.5-4$, distichis; paraphysibus nullis.

Hab. in foliis putridis *Betulæ albæ*, Neufriedenheim München, Bavaria (REHM). — A ceteris speciebus in *Betula* vigentibus bene distincta.

8. *Gnomonia Oryzæ* I. Miyake, Pilze Reispfl. Japan, Journ. College 4366 Agricult. Tokyo, II (1910) p. 250, t. XIII, f. 26-28. — Maculis albescentibus; peritheciis primum immersis dein rostratis prominentibus, phialiformibus $150-200 \mu$. long., $76-95 \mu$. v. plerumque $90-95 \mu$. diam., nigris, pseudoparenchymaticis; ascis elongato-ellipsoideis basi angustatis $38-45 \times 12-16$ plerumque 40×15 , octosporis; tunica supra tenui, infra crassa; sporidiis distichis v. irregulariter distributis, fusioideis, rectis, bilocularibus, medio constrictulis, guttulatis, $15-16 \times 4-5.5$ sæpe loculis inæqualiter crassis.

Hab. in glumis *Oryzæ sativæ*, Awaji Japonia.

Sect. 5. Phæodidymæ.

RHYNCHOSTOMA Karst. — Syll. I p. 730, IX p. 750, XI p. 317, XIV p. 559, XVII p. 689.

1. *Rhynchostoma minutellum* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. 4367 Ak. d. Wissensch. Wien Bd. CXVI Abt. I (1907) pag. 116. — Peritheciis sparsis, immersis, nigris, carbonaceis, levibus, 250 μ . diam., globosis, collo 250 μ . longo, 80 μ . cr. præditis; paraphysibus simplicibus, filiformibus, crassiusculis; ascis cylindræis, basi breviter stipitiformi-angustatis, 100 \approx 5-7, octosporis; sporidiis oblique monostichis, ellipsoideis, griseo-fumoso-brunneis, bilocularibus, ad septum non constrictis, 7-10 \approx 4.

Hab. in ligno abietino putri, Rekawinkel Austriæ inf. — Ab affinibus speciebus microsporidis rostello brevi et ascis cylindræis diversa.

2. *Rhynchostoma brasiliense* v. Höhnelt, Ergebn. Bot. Exp. Südbras. 4368 1901; Denk. k. Ak. d. Wissensch. Wien, Bd. LXXXIII (1907) Extr. pag. 24. — Peritheciis superficialibus, basi immersis, arcte gregariis, plerumque 2-3 approximatis confluentibusque, globosopiriformibus v. parum elongatis, carbonaceis, glabris, 400-500 μ . d. collo 200-300 μ . longo præditis; ascis numerosis, cylindræis, 50-60 \approx 6-8, octosporis; paraphysibus numerosis, tenuiter filiformibus; sporidiis monostichis, bilocularibus, brunneis, elongatis, subfusoides, utrinque obtusatis, medio constrictis, loculo superiore plerumque crassiore, 8-10 \approx 3.

Hab. in ligno indurato, in silvaticis prope Barra Mansa circ. 1000 m. alt. Sao Paulo Brasilæ. — *Rh. cornigero* Karst. affine.

Sect. 6. Hyalophragmiæ.

CERATOSPHERIA Niessl — Syll. II p. 227, IX p. 870, XI p. 840, XVI p. 1137, XVII p. 715.

1. *Ceratosphæria cæspitosa* Lind et Vleugel, Svensk Botan. Tidskr. 4369 II (1908) pag. 365, fig. 1 a, b. — Peritheciis dense gregariis, ad substratum laxè affixis, subsphæroideis, coriaceis, nigris, circ. 0,8 mm. diam., ostiolo rostrato, cylindræo, sat crasso, firmo, circ. 0,4 mm. longo præditis; ostiolis e subiculo pulvinato prominentibus;

subiculo hyphis crassis, brunneis, septatis, repentibus, 4,3 μ . cr., e peritheciis exeuntibus formato; ascis numerosissimis, clavatis, subsessilibus, 50-65 \times 8,7-10, octosporis; sporidiis monostichis v. subdistichis, oblongis, utrinque obtusis, 4-loculatis, ad septa constrictis, paullo curvatis, brunneis, 17-20 \times 5-6, loculis duobus superioribus incrassatis; paraphysibus numerosis, septatis, ascos superantibus, ramosis, hyalinis, 2 μ . crassis.

Hab. in cortice ramulorum ex parte decorticatorum Ribis Grossulariæ, Vesterbatten, Suecia (VLEUGEL).

2. *Ceratosphaeria macrorrhyncha* L. Gaja, Fl. micol. prov. Padova, 4370 p. 20 (sunto lit., 1911). — Peritheciis laxè gregariis v. solitariis, sæpe sub cortice relaxato ramorum decumbentibus, coriaceis, globosis, $\frac{1}{3}$ mm. diam. circiter, longe rostratis, siccis collabescentibus, atris; rostris cylindræis, interdum ad apicem curvulis et attenuatis, 750-800 μ . longis; ascis breviter stipitatis, octosporis, cylindræis, parte sporifera 200-230 \times 10-11, hyalinis; paraphysibus tenuibus, ascos fere æquantibus, granulosis; sporidiis subfusoides, hyalinis, constanter 3-septatis, nos constrictis, 23-25 \times 9-10, recte monostichis.

Hab. sub cortice relaxato ramorum emortuorum Buxi sem-pervirentis, Cattajo, prope Battaglia, in Euganeis Ital. bor. — A *Ceratosphaeria occultata* Feltg. cui magis accedit, differt longitudine rostrorum, numero septorum et dispositione sporidiorum, necnon habitatione sub cortice relaxato.

HYOSPILA Fr. — Syll. II p. 189, IX p. 849, XI p. 336, XIV p. 587.

1. *Hyospila bavarica* Rehm, Ann. Mycol. VI (1908) p. 322. — Peritheciis in folio, pro parte dealbato, gregariis, epiphyllis, singulis maculæ orbiculari subfuscæ innatis, globosis, papillula brevissima conoidea, sæpe lateraliter emergente, nigris, glabris, 0,2 mm. d. contextu parenchymaticò; ascis fusiformibus, 60 \times 10, octosporis; sporidiis oblongo-fusoides, subobtusis, rectis vel subcurvatis, 1-septatis, haud constrictis, utraque cellula guttis duabus oleosis magnis repleta, utrinque brevissime appendiculatis, hyalinis, 12-15 \times 3-3,5, distichis; paraphysibus nullis.

Hab. in folio putrido Aceris Pseudoplatani, Neufriedenheim pr. München (REHM).

2. *Hyospila ? rubicola* Speg., Fungi Chilenses (1910) p. 74. — Maculis nullis; peritheciis laxè gregariis epidermide clypeatim nigre-

facta velatis, lenticularibus, in sicco sæpius subcupulato-collapsis, 100-150 μ . diam.; ascis subcylindraceutis breviter pedicellatis, paraphysatis, octosporis, 70-90 \times 5-6; sporidiis rectis v. oblique monostichis, ellipsoideis, utrinque plus minusve acutiusculis, parvis, hyalinis, primo 1-septato-constrictulis, 4-blastis, dein 3-septatis, non constrictis, 11-14 \times 3-5.

Hab. in ramis siccis Rubi sancti, Bahia de Corral Chile Amer. aust.

Sect. 7. Phæophragmiæ.

RHYNCHOSPHERIA Sacc. — Syll. II p. 112 et 228, XVI p. 524, XVII p. 740.

1. *Rhynchosphæria chatosporioides* Rehm, Ann. Mycol. VI (1908) 4878 p. 322. — Peritheciis gregariis, emergentibus, dein sessilibus, globosis, contextu parenchymatico molli, nigris, 100-150 μ . diam., hyphis simplicibus fuscis, septatis, 30-60 \times 4-5, obtusis, sparsis obsessis, in rostrum 600 \times 30 filiforme glabrum elongatis; ascis ovideo-clavatis, sessilibus, octosporis, 35 \times 10-12; sporidiis fusideo-ellipticis, 3-septatis, ad septa haud constrictis, rectis, cinereo-fuscidulis, 10-12 \times 4, di-tristichis; paraphysibus ramosis, conglutinatiss.

Hab. ad lignum putridum pineum in monte Arber Silvæ bavaricæ (REHM).

2. *Rhynchosphæria megas* Rehm, Ann. Mycol. VII (1909) p. 536. — 4374 Peritheciis gregariis, primitus innatis, dein, ligno corroso, fere sessilibus, globosis, papillula conoidea elongata, apice obtusa, poro perspicuo pertusis, carbonaceis, fusco-atris, glabris, senilibus verruculosis, 1-2 mm. diam. et altis; ascis cylindraceutis, longe stipitatis, p. sporif. 100 \times 12, octosporis, J -; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, unâquaque cellula 1-guttata, rectis, fuscidulis, cellulis terminalibus brevioribus et subhyalinis, ad septa subconstrictis, 16-17 \times 6; monostichis, subinde distichis: paraphysibus filiformibus.

Hab. in ligno putrido Sao Leopoldo, Rio Grande do Sul. Brasilie (THEISSEN S. J.). — *Rh. ceratophoræ* proxima.

Sect. 8. Hyalodictyæ.

RHAMPHORIA Niessl — Syll. II p. 307, IX p. 913.

1. *Rhamphoria icterodes* (Riess) Sacc., in Ann. Myc. IX (1911) p. 250, 4375

Sphaeria icterodes Riess in Klotzsch, Herb. mycol. Cent. XVIII, n. 1739, Bot. Zeit. 1853, p. 236, Hedwigia I, p. 24, t. III, f. i, l, k.
— Sparsa, lignicola, immersa, interiorem ligni partem circumcirca colore citrino tingens; peritheciis coriaceis nigris, subglobosis, 360-376 μ . diam., contextu pseudoparenchymatico obscure fuligineo, ostiolo tereti conoideo erumpente apice poro pertuso, perithecium subæquante; ascis tubulosis, octosporis, 100-115 \times 7; paraphysibus filiformibus mucosis; sporidiis uniserialibus, oblongis, utrinque rotundatis, 14-15 \times 5-5,5, pellucidis, guttulas numerosas irregulariter positas, sæpius 3-5-seriatis, minutas continentibus, demum 3-5-clathrato-pseudoseptatis.

Hab. in lignis arboris frondosæ in Germania. — Perithecia, amisso ostiolo, sæpe collabascunt. Species mihi diu obscura, tandem inspecto specimine originali, clare innotuit.

2. *Rhamphoria thelocarpoidea* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, 4376

CXVI (1007) p. 124, *Coronophora thelocarpoidea* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXV, Abt. I (1906) p. 13. — Peritheciis nigris, carbonaceis, pro more piriformibus, e subcutaneo dein nudatis et superficialibus, conico-papillatis et poro minuto pertusis, solitariis v. 2-pluribus coacervatis, 220-260 μ . lat., 300-360 μ . alt.; ascis paucis, non v. breviter pedicellatis, clavatis, sursum tenuatis apiceque truncatis, 170-200 \times 14-16; sporis spermatioideis ovoideo-oblongis, 2 \times 1, hyalinis, creberrimis, sporidia occultantibus; sporidiis genuinis monostichis clavato-oblongis, 27 \times 7, hyalinis, 7-8-septatis muriformibusque.

Hab. in ramo partim decorticato putrescente Fagi silvaticæ, Wienerwald prope Vindobonam Austriæ. — Affinis *Rhamphorie tympanidisporæ* Rehm.

Sect. 9. Scolecosporæ.

OPHIOCERAS Sacc. — Syll. II p. 358, IX p. 938, XI p. 353, XIV p. 616.

1. *Ophioceras Bambusæ* v. Höhn., Stzb. k. Ak. d. Wiss., CXVIII, 4377

Abt. I (1909) pag. 337. — Peritheciis sparsis, epidermide tectis, nigris, pellucidis, depressis, subscutellatis, levibus, nitidulis, ellipsoideis, usque ad 1 mm. long. et $\frac{2}{3}$ mm. latis, rostello 60-100 μ . lato, fragili, erecto, curvulo, 2-2,5 mm. longo, nigro præditis; ascis cylindraceis, subfusoides, breviter crasseque pedicellatis, obtusis, tenuiter tunicatis, 90-95 \times 5,5-6,5, e tetrasporo octosporis; pseudoparaphysibus numerosis, plerumque ascos longe superantibus, tenuissime tunicatis, guttulatis, septatis, 4-10 μ . cr.; sporidiis hyalinis, filiformibus, utrinque angustato-obtusulis, indistincte septatis, incurvatis, 70-80 \times 1,5.

Hab. in culmo putri Bambusæ, Tjibodas in ins Java.

2. **Ophioceras Corni** Richon, Catal. Champ. Marne pag. 327 et 524, 4378 c. ic. — Peritheciis in greges parvos dispositis, sphaeroideis, nigris, ostiolo longo flexuoso donatis; ascis cylindraceis; sporidiis filiformibus crebro guttulatis, 45 μ . longis.

Hab. in ramis decorticatis Corni sanguineæ in Gallia.

OPHIOGNOMONIA Sacc. — Syll. I p. 419, XIV p. 613, XVII p. 776.

1. **Ophiognomonia Padi** Jaap, Verh. Bot. Ver. Brandenb. XLVII 4379 (1905) p. 87. — Peritheciis gregariis plerumque hypophyllis et in maculis magnis pallescentibus insidentibus, immersis, globosis, 0,5 mm. latis, ostiolo rostellato 1-1,5 mm. longo, nigro, recto præditis; ascis elongato-fusoides, basi in pedicellum attenuatis, octosporis, 60-63 \times 5; sporidiis filiformibus, supra usque ad 2 μ . incrassatis, obtusis, 42-51 μ . long., 1,2-1,5 μ . cr., hyalinis, minute guttulatis, fasciculatis.

Hab. in foliis Pruni Padi prope Triglitz in Prignitz Germaniæ. — Verisimiliter status conidicus huius speciei est *Asteroma Padi* DC. Incertum est an *Sphaeria padicola* Lib. huc pertineat.

2. **Ophiognomonia helvetica** Rehm, Ann. Mycol. V (1907) p. 543. — 4380 Peritheciis sparsis, globulosis, hypophyllis et in epiphyllis protuberantibus, innatis, ostiolo papilliformiter prominente, 0,25 mm. d., glabris; contextu parenchymatico; ascis creberrimis, cylindraceis, ca. 200 \times 8-9, octosporis; sporidiis filiformibus, pluri-guttulatis, haud septatis, hyalinis, ca. 150 \times 1,5, parallele positæ, extra ascum mox vermiformiter curvatis; paraphysibus nullis.

Hab. in foliis siccis Salicis herbaceæ, Lajett ad Pic Aela, Graubünden Helvetiæ (Dr. VOLKART).

3. **Ophiognomonia caulicola** v. Höhn. Fragm. Mykol. VIII (1909), in 4331 Sitzb. k. Ak. d. Wiss. Wien CXVII, Abt. I, p. 1213. — Peri-

theeciis solitariis v. plerumque seriatis v. gregariis, sæpe fere confertim effusis, in cortice interne nidulantibus, basi applanata indentibus, dein cortice secedente liberis, globosis, 360-450 μ . latis, 300 μ . altis, rostello 1-2 mm. longo, cylindraceo, basi circ. 100 μ . supra 60 μ . crasso præditis, levibus, glabris, carbonaceis, nitidulis, æqualiter tenuiter incrassatis, fragilibus, opacis, nigris; paraphysibus nullis; ascis fusoides-clavatis, tenuiter tunicatis, sessilibus, 84 \times 5,5 quique-octosporis; sporidiis subparallelis, cylindraceo-filiformibus, utrinque obtusis, unilocularibus, multiguttulatis, 50-60 \times 1,5.

Hab. in ramis emortuis putrescentibus, verisimiliter *Salviæ glutinosæ* prope Ybossitz in Austria inf. (STRASSER).

LINOSPORA Fuck. — Syll. II p. 354, IX p. 935, XI p. 352, XIV p. 618, XVII p. 775.

1. *Linospora Elasticæ* Koord., Botan. Untersuch. (1907) pag. 193, 4392 fig. 20. — Peritheciis atris, gregariis, foliorum parenchymate immersis, epidermide tectis, demum perforantibus, ovoideo-globulosis, 0,22 mm. latis, clypeo discoideo vel pulvinato, in vivo succoso, sordide albo v. flavescens-albo 0,28 \times 0,42 mm. lato, ostiolo capillari, nigro, glabro, rectiusculo v. curvulo, facile deciduo, 600 μ . longo, 30 μ . lato; ascis cylindraceis, apice rotundatis, subsessilibus per basim dehiscens, 88-98 \times 4-4,5 fasciculatis, paraphysatis; sporidiis 8 bacillaribus, continuis, rectiusculis v. curvulis, 84-88 \times 1-1,5, utrinque truncatis, hyalinis, multiguttulatis.

Hab. in foliis putrescentibus *Fici elasticæ* prope Purwo-redjo prov. Kedu in ins. Java (KOORDERS). — *Linosp. capillari* Penz. et Sacc. proxima, differt sporidiis tenuioribus et clypeo carnosio.

2. *Linospora subtropicalis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4388 (1909) p. 403. — Peritheciis epidermide persistente scutatum nigrefacta tectis, lenticularibus, 150-180 μ . diam., vix papillato-ostiatis; ascis fusoides apice crasse tunicatis basi breviter cuneato-pedicellatis, 90-110 \times 10, octosporis; sporidiis hyalinis, pluriguttulatis 70 \times 1.

Hab. ad scapos aridos *Oncidii* cujusdam in silvis primævis secus Rio San Lorenzo, Salta, Argentina Amer. austr.

OPHIOBOLUS Riess — Syll. II p. 337, IX p. 923, XI p. 351, XIV p. 614, XVI p. 557, XVII p. 769. — Pleræque species donantur

ostiolo non vere rostellato sed papillato, hinc genus hoc, demptis nonnullis speciebus, potius Sphæriaceis quam Ceratostomataceis adscribendum videtur.

1. *Ophiobolus styracincola* Rehm, Ann. Mycol. V (1907) p. 529. — 4384

Peritheciis dispersis, in hypophyllo immutato, inter pilos folii sessilibus, globosis, 150 μ . diam. in papillulam 60 μ . longam, 40 μ . lat. abeuntibus, glabris, contextu parenchymatico membranaceo, fusco; ascis cylindraceo-clavatis, apice rotundatis, 100-120 \times 9-10, tetrasporis; sporidiis filiformibus, apice obtusis et sublatioribus, infra acutatis, 8-10-septatis, quaque cellula biguttata, hyalinis, 80 \times 2,5, parallele positis; paraphysibus subramosis, 1,5-2 μ . cr., hyalinis.

Hab. ad folia *Styracis*, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK). — *Oph. Tanacetii* affinis.

2. *Ophiobolus minor* Bubák, Ann. Mycol. IV (1906) p. 110. — Pe. 4385

Peritheciis globosis vel leniter depresso, cortice immersis vel collo brevi vix prominulis, dein erumpentibus, nigris, nitidulis, 200-300 μ . diam., contextu parenchymatico olivaceo; ascis cylindraceis 65-90 \times 7-9, rectis v. curvulis, supra rotundatis, basi breviter pedicellatis, paraphysibus filiformibus immixtis; sporidiis filiformibus plus v. minus incurvatis, 55-70 \times 2-2,5, utrinque acutatis, multiguttulatis, pluriseptatis, hyalinis.

Hab. in ramulis vivis *Lonicerae Xylostei* prope Tabor in Bohemia.

3. *Ophiobolus microstomus* Speg., Fungi Chilenses (1910) p. 95. — 4386

Peritheciis sparsis v. laxe gregariis, primo tectis dein nudis, superficialibus, subglobosis, superne acutato-ostiolatis, duris, carbonaceis, glabris, 200-250 μ . diam.; ascis linearibus breviter pedicellatis dense paraphysatis, 170 \times 10; sporidiis octonis asco conspicue brevioribus, filiformibus, chlorinis, pluriseptatis, 90-100 \times 2.

Hab. in pedunculis emortuis putrescentibus *Lobeliae Tupæ* prope Ciudad de Valdivia Chile Amer. austr. — *Oph. porphyrogono* (Tode) affinis sed differt sporidiis brevioribus, ostiolo minus distincto, maculis nullis.

4. *Ophiobolus sceliscophorus* Fairm., Proc. Rochest. Ac. of Sc. IV 4387

(1906) p. 215, tab. XX, fig. 1. — Peritheciis minutis, nigris, in maculis arescentibus insidentibus; ascis clavato-cylindraceis, plerumque incurvatis, raro rectis, 90-100 \times 10; paraphysibus non visis; sporidiis filiformibus, incurvatis, 10-11-septatis, articulis versus apicem sæpe subincrassatis, hyalinis, 90 \times 2,5-3.

Hab. in foliis *Phlogis Drummondii*, Lyndonville New York Amer. bor. — Etym. a *sceliscos* crûs, ob formam sporidiorum.

5. *Ophiobolus hypophyllus* Rehm, Ann. Mycol. VI (1908) p. 317. — 4388
Peritheciis in hypophyllo late hyalino-flavidulo dispersis, primitus innatis, dein emergentibus, globulosis, vix papillulatis, glabris, nigris, 150 μ . diam., contextu parenchymatico, fusco; ascis cylindraceis, apice rotundatis, 80-100 \times 8-10, tetrasporis; sporidiis filiformibus, rectis, utrinque obtusis, 7-septatis, quaque cellula biguttata, hyalinis, 60-80 \times 2-2,5, parallele positis; paraphysibus filiformibus, septatis, 2 μ . crassis.

Hab. ad folia viva *Solanaceæ*, cujusdam Sao Leopoldo, Rio Grande do Sul, Brasilie (Rick S. J.).

6. *Ophiobolus Rostrupii* Ferdinandsen et Winge, Botan. Tidsskrift 29 4389
Bd. (1909) p. 317, fig. 6. — Peritheciis amphigenis, primo tectis, dein epidermidem pustuliformiter levatam perforantibus, lenticulari-globosis, 300-400 μ . diam., vix ostiolatis, poro circ. 30-40 μ . diam. pertusis, submembranaceis, atris; ascis cylindraceis, apice rotundatis, deorsum attenuatis, sessilibus, 130-140 \times 14-16, junioribus membrana valde incrassata, poro nullo; sporidiis octonis, filiformibus, flexilibus, sæpius parallele fasciculatis, septis 6-7 genuinis, nonnumquam paucis spuriis instructis, ad septum tertium v. quartum profundius constrictis, ceterum viz constrictulis, 115-135 μ . long. ad constrictionem profundam utrobique 4,5-5,5 μ . lat., hinc apicem versus lenissime, basim versus magis attenuatis, superne 3-4 μ ., inferne 1-2 μ . lat., hyalinis; paraphysibus laxis, evanidis, tenuissime septatis, hyalinis, ascos superantibus.

Hab. ad folia viva *Brunellæ* sp. in Insula Unalaska Aleutarum Amer. bor.

7. *Ophiobolus phragmosporus* Speg., An. Mus. Nac. Buenos Aires 4390
t. XIX (1909) p. 402. — Peritheciis matrice atrata sparsis, erumpenti-subsuperficialibus, subconoideis, acute majusculæque papillato-ostiolatis 200-250 μ . diam., atris; ascis linearibus breviter cuneato-pedicellatis 170-180 \times 14-15, paraphysatis, octosporis; sporidiis fasciculatis flavidulis, fragilissimis, 120-140 \times 4-5, articulis cylindraceis 12-15, brevibus, grosse biguttulatis præditis.

Hab. ad caules aridos *Echii plantaginei* in pratis La Plata, Argentina Amer. austr. — Species eximia mox dignoscenda.

8. *Ophiobolus rivulariosporus* Starb., Ascom. Schwed. Chaco-Cordill. 4391
Exp., Arkiv f. Bot. t. V (1905) p. 24, fig. 20. — Peritheciis immersis, per epidermidem fissam erumpentibus, demum liberatis,

superficialibus, interdum sparsis, sæpissime seriatim vel aliter aggregatis, conoideo-globosis, manifestim, interdum abrupte, conice vel fere cylindrice papillatis, totis glabris, perpauillum rugosiusculis, contextu coriaceo, basim versus prosenchymatico, cellulis seriatis, ostiolum versus globulosis, atratis, sub lente nigro-fuligineis c. 300 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, sessilibus, 139-150 \times 12,5-14; sporidiis fasciculatim conglobatis, clavulato-filiformibus, sursum appendice mucosa, sphaeroidea, circa 5 μ . diam. semper ornatis, clavulatim incrassatis, clavula sæpissime triseptata, ad inferius septum paullum constrictis, deorsum sensim et attenuatim acutatis, guttulis moniliformiter ordinatis præditis, deinde totis septatis, chlorino-olivaceis, 127-135 μ . longis, superne 4,5 μ ., inferne 2,5 μ . crassis; paraphysibus filiformibus, conglomeratis, hyalinis.

Hab. in caulibus aridis *Compositarum* sp., Tarija Boliviae.
— Fabrica sporidiorum pulcherrima hæc species prædistincta.

9. *Ophiobolus chilensis* Speg., *Fungi Chilenses* (1910) pag. 95, cum 4392 icon. — Maculis nullis; peritheciis laxè gregariis, primo epidermide tectis dein erumpentibus v. denudatis atris, e globoso subconoideis, 150 μ . diam., glabris sed basi sæpius hyphis paucis, 50-100 \times 3-4 cinctis, ostiolo acutiusculo papillato coronatis, coriaccellis; ascis cylindraceis modice attenuato-pedicellatis, paraphysatis, 170 \times 12; sporidiisasco dimidio brevioribus, acicularibus, 15-locularibus, loco quarto supero leniter inflato, obscure chlorinis, 80-85 \times 3-5.

Hab. in pedunculis emortuis putrescentibus *Cirsii lanceolati* prope Ciudad de Valdivia Chile Amer. austr.

10. *Ophiobolus Morthieri* Sacc. et Berl. — Syll. IX, p. 920. — var. 4393
Senecionis Rehm in Strasser, *Verh. k. k. zool.-bot. Ges. Wien LVII* (1907) p. 318. — Peritheciis globosis 1,5 mm. diam., pilis brunneis obsitis, collo elongato usque ad 200 μ . longo præditis; ascis octosporis 120-180 \times 6-8; sporidiis filiformibus ascos subæquantibus.

Hab. in caulibus emortuis *Senecionis nemorensis*, Holzschlängen Sonntagberg Austria inf.

11. *Ophiobolus tenellus* (Awd.) Sacc. — Syll. II, pag. 346. — var. 4394
Lactucæ Rehm, *Ascom. Exsicc. fasc. 43, n. 1808* et *Ann. Mycol. VII* (1909) p. 136. — Peritheciis denique omnino immersis, ostiolo vix emergente et sensim cylindraceo; ascis 150 \times 8-9, 8-sporis; sporidiis parallele dispositis, luteolis, 8-12-cellularibus, 100 \times 1,5-2, extra ascum mox incurvatis.

Hab. in caulibus emortuis Lactucæ salignæ prope Grosshadern München Baviaræ (REHM).

12. **Ophiobolus Broussonetiæ** Hollós, Ann. Mus. Nat. Hungar. V 4396 (1907) pag. 46. — Peritheciis primum epidermide tectis, demum erumpentibus, nigris, 450-550 μ . latis, ostiolo cylindraceo-conico, 170-280 \times 140; ascis cylindraceis, apice rotundatis atque incrassatis, breve stipitatis, octosporis, 150-160 \times 3,5-4, filiformi paraphysatis; sporidiis æqualiter filiformibus, rectis v. curvulis, continuis, hyalino-luteolis, asco æquilongis, 0,5 μ . cr.

Hab. in ramulis siccis Broussonetiæ papyriferae, Keskemét Hungariæ.

13. **Ophiobolus Nipæ** P. Henn., Hedwigia XLVII (1908) p. 257. — 4396 Peritheciis gregariis innato-erumpentibus, rotundato-depressis, atris ostiolo conoideo, 0,5-0,6 mm. diam.; ascis cylindraceo-clavatis, vertice obtuso-rotundatis, curvulis, 8-sporis, 100-120 \times 10-13; sporidiis filiformibus, parallelis, utrinque obtusis, curvulis, pluriseptatis, 80-100 \times 2,5-3,5, hyalinis.

Hab. in petiolis emortuis Nipæ urticantis, Luzon, Prov. Pampanga. San Esteban Ins. Philippin. (MERRILL).

14. **Ophiobolus Livistonæ** P. Henn., Hedwigia XLVII (1908) p. 257. 4397 — Peritheciis gregariis innato-erumpentibus, superficialibus, rotundato-depressis, atris, conico-ostiolatis, 0,4-0,5 mm. diam.; ascis cylindraceo-fusoideis, obtusiusculis, paraphysatis, 8-sporis, 80-110 \times 5-8; sporidiis parallelis, filiformibus, obtusis, pluriseptatis hyalinis, 70-80 \times 2.

Hab. in petiolis emortuis Livistonæ, Mindanao, Davao Ins. Philippin. (COPELAND).

15. **Ophiobolus Oryzæ** I. Miyake Pilze Reispfl. Japan (in Journ. College 4398 Agricult. Tokyo, II (1910) p. 249, t. XIII, f. 20-22. — Peritheciis nigris, crasse pseudoparenchymaticis, globosis v. ellipsoideis, immersis sed ostiolo verruciformi prominulis, 250 μ . circ. diam., 300 μ . circ. altis; ascis cylindraceis, 125-150 \times 8-10, octosporis; paraphysibus filiformibus ascis æquantibus v. parum longioribus; sporidiis filiformibus, curvatis et contortis, 5-7-septatis, obscure flavis 100-130 \times 2-3.

Hab. in foliis et glumis Oryzæ sativæ in Japonia.

16. **Ophiobolus Ellisianus** Berlese, Icon. fung. II, p. 127, t. 154, f. 2. 4399 — Peritheciis sparsis, atris, primo tectis, dein prominulis, membranaceis, globoso-depressis, ostiolo minuto papillato, obtusulo, $\frac{1}{4}$ mm. diam.; ascis cylindraceo-clavulatis, 170-190 \times 11-13, basi atte-

nnato-stipitellatis, octosporis; sporidiis longe cylindraceis crebre 23-26-pseudoseptatis, utrinque rotundatis, 150-165 \times 3-4, lutescentibus, loculis omnibus subæqualibus, non secedentibus.

Hab. in caulibus herbaceis, Utah Amer. bor. (J. B. ELLIS).

Fam. 4. Xylariaceæ TUL. ()*

Sect. 1. Phæosporæ.

HYPOXYLON Bull. — Syll. I p. 352, IX p. 543, XI p. 385, XIV p. 509, XVI p. 445, XVII p. 855.

1. *Hypoxylon lichenicola* v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 4400 Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 26. — Stromatibus erumpentibus demum superficialibus, parvis, irregulariter rotundatis; peritheciis 1 v. paucis v. numerosis et tunc 2-4 seriatis, globosis, distincte papillato-ostiolatis, carbonaceis, nigris, opacis et sæpe rugulosis, 600-1000 μ . diam., prominentibus v. plus minus immersis; ascis cylindraceis 160-180 \times 10-12, octosporis; paraphysibus numerosis, filiformibus, ascos longitudine æquantibus, demum mucoso-diffluentibus; sporidiis monostichis, elongato-fusoideis, utrinque obtusis, nigris, unilocularibus, 30-38 \times 8-9,5.

Hab. parasiticum in podetiis sterilibus *Cladoniæ* (?) sp. ad flumen Rio Pardo in districtu S. Cruz Sao Paulo Brasilæ.

2. *Hypoxylon bogoriense* von Höhnelt, *Stzb. k. Ak. d. Wiss. Wien* 4401 CXVIII, Abt. I (1909) pag. 341; Rehm, *Ascom. exs. fasc.* 44, n. 1844, *Ann. Mycol.* VII (1909) p. 404. — Stromate tenui late effuso, plerumque usque ad 20 cm. et ultra longo, primum violaceo-brunneo dein obscuriori striato, margine acuto v. sensim defluente; peritheciis arcte gregariis, prismaticis, 600-700 μ . altis, 260 μ . latis, convexulis, peritheciis centralibus usque ad 100 μ . lat. ostiolato-papillatis; ascis cylindraceis, numerosis, octosporis, 65 \times 3; sporidiis laxè monostichis, elongato-cylindraceis, rectis v. vix cur-

(*) Ofr. F. Theissen, *Xylariaceæ austro-americanæ*, in *Ann. Mycol.* VI et VII (1908-1909) et *Xylariaceæ austro-brasilienses*, in *Denkschr. k. Akad. Wien* LXXXIII (1909).

vulis, utrinque rotundatis, pallide brunneo-violaceis, 5,5-6 × 1,8-2; stromate intus fragili, carbonaceo.

Hab. in ramis putrescentibus Albizziæ moluccanæ, in Horto bot. Buitenzorg in ins. Java.

3. *Hypoxylon Starbäckii* Ferd. et Winge, Botanisk Tidsskrift XXIX 4402 (1908) p. 14, *Hypoxylon areolatum* Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 31, fig. 22, non B. et Curt. — Syll. I, pag. 366. — Stromatibus applanatis vel fere hemisphærico-pulvinatis, superficialibus, margine tumido, fere libero, superficie primo levigata, verticibus perithecorum applanatis, irregulariter polygono-limitatis in areolas divisus, demum hinc inde tuberculosis, pruina primo ferrugineo-rubiginosa, denique fusco-nigra, deterribili obsessis, vetustate rimosus, intus hinc inde rimosim excavatis, 2-3 cm. longis, 1-2 cm. latis, $\frac{1}{2}$ - $\frac{2}{3}$ cm. altis, textura fibroso-coriacea, fere suberosa vel daldiniacea, non zonata; peritheciis polystichis, marginem versus sæpe arcuatis, tubulosis vel elongatis, demum papillatim paulumque prominulis, vertice non pruinoso plicato-rugoso, ore vix visibili perforato, usque ad $1\frac{1}{2}$ mm. altis, $\frac{1}{3}$ mm. diam.; sporidiis fuscis, navicularibus, 12-17 × 9-10 e latere 5-7,5 μ . cr.

Hab. ad truncos, Gran Chaco, Tatarenda Bolivæ. — *H. solidum* Berk., sporidiis diversum, *H. dubiosum* Speg., perithecorum dimensionibus præsertim divergens. An potius *Penzigiae* sp., observante auctore?

4. *Hypoxylon multifforme* Fr. — Syll. I, pag. 363 — *H. granulosum* 4403 Bull. — var. *luxurians* Rehm, Ann. Myc. III (1905) p. 229, Ascom. exsicc. n. 1595. — Stromatibus late irregulariter effusis, undulato-rugosis, margine sæpe sterilibus, crassis, duris, superimpositis, nigris.

Hab. ad lignum putre betulinum, Falkenberg Baviaræ (PLOSSEL, PAZSCHKE).

5. *Hypoxylon Pseudo-tubulina* Ces. — Syll. I, p. 364 — var. *macro-* 4404 *spermum* Theiss., Ann. Mycol. VI (1908) p. 346. — Peritheciis paucis, 3-6 in quoque stromate, globoso-angulatis; stromate intus albo, superficie valde verrucoso-scruposo; ostiolis ob verrucas imperspicuis, mox areola delicatissima micante instructis, dein poro pertusis; ascis maximis, 200-240 × 14-17, pedicello 40-80 × 5-6; sporidiis elongato-fusoideis, utrinque angustato-obtusulis vel subapiculatis, opacis, gutta una magna vel biguttatis, 40-46 × 12-15.

Hab. ad cortices crassos in silva, Sao Leopoldo Brasilæ. —

Differt a typo stromatibus minoribus sporidiisque multo majoribus. — Var. *macrostroma* Theiss., l. c. — Stromatibus sæpe majoribus, usque ad 6 mm. diam. vel pluribus connatis, gyroso-mammillatis, intus albis; peritheciis solidis, atris, globosis v. angulatis, parietibus crassis instructis, 500-800 μ . diam.; ascis 130-170 μ ., pedicello 60-90 μ . longo; sporidiis 30-38 \times 8-9. — Ad truncos, Sao Leopoldo. — *Hyp. cantareirensi* P. Henn. valde affine nisi identicum.

6. *Hypoxylon nucigenum* P. Henn., Hedwigia XLVII (1908) p. 259. 4405

— Stromatibus subgloboso-depressis, cinereo-fuscis v. nigricantibus, superficie subareolatis, conico-ostiolatis, intus pallidis dein atro-fuscis c. 2-2,5 cm. diam.; peritheciis angulato-ellipsoideis, lignosis, cinereo-fuscis, 5-7 mm. diam. (nuci Pini Cembræ similibus); ascis cylindraceutis, 8-sporis, plerumque secedentibus; sporidiis oblique monostichis, oblonge navicularibus, utrinque obtuso-rotundatis, atris, 40-52 \times 10-13.

Hab. in truncis emortuis, Luzon, Prov. Bataan, Lamas River Ins. Philippin. (COPELAND).

7. *Hypoxylon Heinricherii* Bres., Ann. Mycol. V (1907) p. 241. — 4406

Stromatibus pulvinatis, 1 cm. circiter diam., fuscis, intus albis; peritheciis immersis, subglobosis, ostioliis emergentibus, papillatis, nigris præditis; ascis jam resorptis; sporidiis late obovatis e latere subdepressis, fuscis, 12-15 \times 7-9.

Hab. ad ramos corticatos in insula Java (HEINRICHER).

8. *Hypoxylon crassum* Mattiolo et Sacc., Ann. di Botan. VII (1908) 4407

p. 144 et in Il Ruwenzori (1909) Fungi p. 11, t. III, f. 6-8. — Stromatibus superficialibus majusculis, e subgloboso hemisphaericis, basi leviter coarctatis, 2-3 cm. circiter latis, 0,7-1 cm. altis, carbonaceis, nigris, subopacis, superficie ob ostiola prominula mammillosis, intus atro-fulgineis, suberosis, non stratis; peritheciis densis, monostichis, immersis, levissime emergentibus, ovoideo-oblongis, deorsum conspicue acutatis, 1,5 mm. long., 0,5-0,8 mm. latis; ostioliis obtuso-papillatis, prominulis, centro pertusis; ascis cylindraceutis octosporis, parte sporifera 105-120 \times 11-12; paraphysibus tenuissimis filiformibus; sporidiis monostichis, ellipsoideo-oblongis, leviter inæquilateralibus utrinque rotundatis, 16-18 \times 7, variantibus usque ad 20 \times 8-9, fuliginosis.

Hab. in ramis emortuis in silva inter Bihunga (1920 m.) et Nakitava (2652 m.) Africae austr. — Affine *Hypoxylon majusculo* Cooke, sed differt colore jugiter nigro, peritheciis ostioliisque ma-

gis prominulis, sporidiis obtusis, etc. et *H. multiformi*, sed sporidia multo ampliora; ab *H. Buttneri* Henn., recedit stromate multo majore (nec tantum 1 mm. diam.) et sporidiis angustioribus et brevioribus, nec $16-35 \times 17$.

9. *Hypoxylon apoense* P. Henn., Hedwigia XLVII (1908) p. 259. — 4408

Stromatibus hemisphaericis, atris, intus pallidis, rugulosis, opacis, ostiolis prominulis, 1,5-2,5 cm. diam.; peritheciis immersis, globulosis, 0,5-0,8 mm. diam.; ascis pedicellatis, cylindraceis, obtusis, p. spor. c. $140-160 \times 12-14$, 8-sporis, paraphysatis; sporidiis oblique monostichis, oblonge navicularibus obtusis vel acutiusculis, $25-32 \times 8-12$, atris.

Hab. in truncis emortuis, Mindanao Davao, Mt. Apo 2000 m. Ins. Philippin. (COPELAND).

10. *Hypoxylon congoense* Sacc., Myc. cong. novi, Anz. Myc. IV (1906) 4409

p. 76. — Late effusum, applanatum sed hypostromate pulvinato crassiusculo suffultum, intus et extus nigrum sed superficie pruina atro-purpurea conspersum, carbonaceum, peritheciis non vel vix emergentibus fere imperspicue tuberculosum; peritheciis densissime stipatis, verticaliter oblongo-cylindraceis, basi acutis, apice obtusis, 1,5 mm. altis, 0,5 mm. latis; ostiolis obsoletis; ascis . . . jam resorptis; sporidiis oblongis utrinque rotundatis, inæquilateralis, $16-22 \times 8-9$, atro-fuliginis.

Hab. ad cortices putres, Kisanu Afr. (J. GILLET). — Habitu *Hypoxylon atro-purpureum* fere æmulatur sed sporidiis duplo majoribus et perithecorum forma statim dignoscitur. Pertinet ad sect. *Placoxylon*.

11. *Hypoxylon albo-tectum* Rehm in Rehm et Rick, Broteria V (1906) 4410

p. 228. — Stromatibus per corticem erumpentibus, irregulariter expansis, 0,5-2 cm. lat., 1-1,5 mm. cr., atris; peritheciis monostiche aggregatis, ovoideis, 1 mm. diam., plerumque semiglobosis v. globosis, prominentibus, verrucosis, pruina crassa alba præter centrum obtectis, applanatis, tenuiter marginatis poroque minimò per-tusis; ascis cylindraceis, longissimis, octosporis; sporidiis elliptico-navicularibus, 1-cellularibus, 2-guttatis, fuscis, strato mucoso tenui obductis, $9-14 \times 4$, monostichis; paraphysibus filiformibus.

Hab. ad ramulum putrem, Torres Vedras Lusitanicæ. — Pruina alba crassa, ut in *Hypox. Bovei*, mox dignoscenda species.

12. *Hypoxylon abyssinicum* Sacc. in Ann. Myc. X (1912) p. 312. — 4411

Effusum, superficiale, nigrum, carbonaceum; peritheciis modo discretis et laxè coherentibus, globosis, magnis, 2 mm. diam., di-

stinete acute papillatis, modo et multo frequentius 2-6 in soros intermixtos 3-5 mm. diam., alte pulvinatos coalescentibus et ostiolis totidem similibus signatis; ascis cylindricis sensim pedicellatis, apice rotundatis, 150-160 \times 8-10, octosporis, paraphysatis; sporidiis oblique monostichis, oblongo-fusoideis utrinque obtusulis, e latere navicularibus, 28-30 \times 7-9, fuligineis 1-2-guttatis.

Hab. in corticibus putrescentibus in Abyssinia, April 1904 (A. PAPPI). — Ab affini *Hyp. regali* Morg. — Syll. XVII, p. 610 — differt peritheciis majoribus, nunc discretis nunc discretis nunc 2-6-confluentibus, sporidiis paullo longioribus et angustioribus et patria omnino diversa. Pulcherrima species.

13. *Hypoxylon Sancto-Janianum* Ferd. et Winge, Botanisk Tidsskrift 4412 XXIX (1908) p. 14, tab. I, fig. 6. — Stromate superficiali, repando, 0,5 cm. lato, hinc inde obsolete rimoso, margine undulato-tumidulo, irregulari, distincte vero limitato, intus fuligineo-fusco, extus crusta ferruginea, ostiolis peritheciolorum obscurioribus punctata tecto, strato subperitheciali fibroso, textura fere daldiniacea instructo; crusta obtegente externe modo ferruginea, interne autem vivide rubra, inter perithecia singula plus minusve profunde penetrante; peritheciis monostichis, densissime stipatis, tubulatis, usque od 1 $\frac{3}{4}$ mm. long., $\frac{1}{3}$ mm. cr.; ostiolis levibus, crateriformiter pertusis, crusta obscurioribus eamque papillatim penetrantibus; ascis cylindraceutis (?); sporidiis ellipsoideo-subnavicularibus, utrinque rotundatis, e latere leviter compressis, 14,5-19 \times 7-8,5 pluriguttulatis, atro-fuscis.

Hab. in insula St. Jean Indiæ occ. (RAUNKIAER). — *Hypoxylon areolato* Starb. affinis species. E sect. *Placoxylon*.

14. *Hypoxylon paulistanum* Speg., Fungi Paul. Rev. Mus. La Plata 4413 t. XV, p. 19 (1908). — Stromatibus erumpenti-superficialibus subparvis pulvinulatis margine obtusis, primo levibus pallide lateritiis dein fuscis squarrelis punctulatis peritheciis globoso-angulatis 120-150 μ . coriaccis, immersis non v. vix prominulis; ascis cylindraceutis parce pseudoparaphysatis, 85-100 \times 14, octosporis; sporidiis ellipsoideo-cymbiformibus, monostichis, opace fuligineis, mediocribus, 20 \times 10, levibus.

Hab. in ramulis emortuis adhuc pendulis prope Sao Paulo Brasilia (USTERT). — Species *Hypoxylon fusco* (Pers.) Fr. peraffinis, ascis a paraphysatis sporisque majoribus distincta.

15. *Hypoxylon Hibisci* P. Henn., Hedwigia XLVII (1908) p. 259. — 4414 Stromatibus subgregarie erumpentibus superficialibus, hemisphae-

rico-pulvinatis v. subglobosis 0,5-1 cm. diam., rufo brunneis dein fuscis, opacis, vix ostiolatis, rugulosis, intus fuscis; peritheciis immersis globulosis; ascis cylindraceo-clavatis, pedicellatis 8-sporis, paraphysatis; sporidiis monostichis, ellipsoideis, obtusis, atris, 6-10 \times 3,5-4.

Hab. in ramis siccis Hibisci Rosæ-sinensis, Manila Ins. Philipp. (MERRILL).

16. *Hypoxylon hæmatites* Lév. — Syll. IX, p. 559 — var. *macro-* 4415
sporum Theiss., Ann. Mycol. VI (1908) p. 345. — Differt a typo notis microscopicis et stromate basali fortius evoluto, in quo nidulant perithecia sæpe discreta; ascis 110-125 \times 16-18, pedicello breviusculo 15-30 μ . longo; sporidiis ellipsoideis, obtusis, nigris, rarius subglobosis, 18-27 \times 12-14.

Hab. ad truncos, Rio grande do Sul, Brasilia.

17. *Hypoxylon collabens* Theiss., Ann. Mycol. VI (1908) p. 346. — 4416
Stromate juventute crasse pulvinato, placentiformi, rubigineo-brunneo, orbiculari v. oblongo, 1 $\frac{1}{2}$ cm. lato, 4-8 mm. alto, levi, haud nitente, maturitate collabente, multo tenuiore, nigrescente; peritheciis emergentibus submammillatis ostiolisque acutis conicis superficiem asperam reddentibus, stipatis, elliptico-globosis, 800 μ . diam. usque ad 1 mm. altis, duris; ascis jam evanidis; sporidiis badiis 18-22 \times 6 $\frac{1}{2}$ -9, hinc obtusis illinc acutis.

Hab. ad cortices in silva, Sao Leopoldo (J. RICK S. J.).

18. *Hypoxylon Kermesi* Speg., An. Mus. Nac. Buenos Aires t. XIX 4417
(1909) p. 343. — Stromatibus superficialibus subgloboso-depressis v. sublenticularibus, extus aurantiacis dense majusculæque nigro-ostiolatis, intus concoloribus dense perithecigeris; peritheciis densissime constipatis, ellipsoideo-obovatis, apice late ostiolato-perforatis, carbonaceis nigerrimis 300-400 \times 200-300; ascis mox diffuentibus; sporidiis senescentibus navicularibus opace fuligineis, 12-16 \times 5-9.

Hab. ad cortices truncorum putrescentium in silvis prope Formosa, Rep. Argentina Amer. austr.

19. *Hypoxylon rubiginosum* (Pers.) Fr. — Syll. I, p. 376 — var. *in-* 4418
signe Rehm in Strasser, Verh. zool.-bot. Ges. Wien, LVII (1907) p. 323. — A typo differt ascis majoribus (p. sp. usque 120 long.) sporidiis etiam majoribus 20-24 (usque ad 38) \times 10-12.

Hab. in ligno sicco fagineo, Sonntagberg Austriæ inf. (P. LAMBERT). — Var. *microcarpum* Speg. An. Mus. Nac. Buenos Aires t. XVII (1908) p. 120. — A typo differt peritheciis dense con-

stipatis ac conspicue minoribus 100-110 μ . diam. — Ad ramos dejectos subputrescentes Ilicis paraguariensis in silvis circ. San Pedro Argentina Amer. austr.

20. *Hypoxylon pulcherrimum* v. Höhn., Ann. Myc. III (1905) p. 187. 4419

— Ita vocandum *Hypoxylon coccineum* Bull. v. *microcarpum* Bizz. (Syll. IX, p. 545) quod, sec. v. Höhn., ut bona species habendum. *Hypox. microcarpum* Penz. et Sacc. est quoque diversum.

21. *Hypoxylon diatrypeoides* Rehm, Ann. Mycol. V (1907) p. 525. — 4420

Stromatibus ab initio cortice innatis ab eoque rubro-stromatico subtectis, prominentibus, dein prorumpentibus, irregulariter orbicularibus, gregariis, demum cortice secedente fere sessilibus, semiglobosis, 1-4 mm. diam., extus rubro-fuscidulis, ca. 2 mm. altis, subcarnosis, intus rubescentibus, glabris; peritheciis globulosis 5-30 innatis, membranaceis fusciculo-contextis, monostichis, ca. 0,4 mm. diam., semiglobosis demum prominentibus, interdum fere gregarie exstantibus, rarissime papillulatis, poro conspicuo impresso albidomarginato pertusis; ascis cylindraceis, apice rotundatis, 100-110 \times 15-17, octosporis; sporidiis ellipsoideis, rectis vel subcurvatis, violaceo-fuscis, 18-20 \times 8, monostichis; paraphysibus ramosis, septatis, 3 μ . cr., gelatinosis.

Hab. ad truncos, Sao Paulo, Brasilia (USTERI). — Stromatibus molliusculis ad Hypocreaceas vergit, habitu vero *Diatrypen* in memoriam revocat.

22. *Hypoxylon ? valsarioides* Speg., Fungi Chilenses (1910) pag. 48, 4421

cum icon. — Stromatibus cortice innato-erumpentibus parvis superne planiusculis levibus, extus fusco-atris, intus aurantio-lateritiis; peritheciis majusculis globosis paucis constipatis substantia stromatica junctis, carbonaceis nigris, obsolete ostiolatis, 1-1,3 mm. diam.; ascis linearibus longe pedicellatis paraphysatis octosporis, 200 \times 5-6; sporidiis monostichis cylindraceo-ellipsoideis grosse uniguttulatis fuliginosis, 12 \times 4.

Hab. ad ramos emortuos Perseæ Lingue prope Ciudad de Valdivia, Chile Amer. austr. — Huc pertinet verisimiliter *Hyp. rubricosum* Montagne nec Fries.

23. *Hypoxylon Dieckmannii* Theiss., Ann. Mycol. VI (1908) p. 346. 4422

— Stromatibus pulvinatis, discretis, 1-4 mm. diam. vel undulato-confluentibus, 1-2 mm. altis, margine rotundato, initio purpureo-brunneis, dein decolorantibus fusco-atris vel definite atris, haud nitentibus, sub lente pulveraceo-rugosis, ostiolis minutissimis pertusis non vel vix emergentibus, poro centrali flavido sub lente

forti solum visibili, intus carbonaceo-duris, ætate fuligineo-pulveraceis; peritheciis stipatis, immersis, ovato-ellipticis, $600 \approx 200$, collo brevi superficiem attingentibus; ascis, non visis; sporidiis oblongo-ellipticis, utrinque rotundatis, fuscis, demum brunnescentibus, initio biguttulatis, $7-9 \approx 3-4 \frac{1}{2}$.

Hab. in cortice duro in silva, Sao Leopoldo, Brasilia.

24. *Hypoxylon glomerulatum* Theiss., Ann. Mycol. VI (1908) p. 345. — 4423

Peritheciis minutis 300-700 μ . diam. singulis v. paucis aggregatis v. in pulvinulos discretos 3-5 mm. latos stromate parcissimo interjecto confluentibus, primo furfure testaceo-purpureo conspersis, dein nigrescentibus, vertice prominulis, umbilicatis, ostiolo nigro punctiformi dein pertuso; ascis magnis 100-130 \approx 12-15, pedicello firmo usque ad 40 μ . longo; sporidiis octonis, plano-convexis, rarius recte ellipsoideis, utrinque rotundatis vel subapiculatis, aterimis, grosse guttatis, 18-23 \approx 10-12.

Hab. ad ramulos exsiccatos in silvulis («capao» dictis), Sao Leopoldo Brasilia. — Ab *Hyp. rubello* Penz. et Sacc. sporidiis latioribus nec fusoides nec acutis dignoscenda species.

25. *Hypoxylon pumilio* Sacc et Fairm. in Saccardo Micromycet. A. 4424

mer. novi, Journ. of Myc. XII (1906) p. 47. — Minutum, extus e roseo isabellinum, breviter effusum, rarius in acervulos exiguos 1 mm. latos limitatum, plerumque 4-6 mm. long., 2 mm. lat., applanatum v. vix convexulum; peritheciis unistratosi perexiguis, globulosis vix 200 μ . diam.; medietate superiori discretis, hinc prominulis, extus tenuiter roseo-pruinosis, intus nigris, ostiolo brevissimo lato obtuso, minutissime pertuso, fere deterso hinc nigricante, 90-100 μ . diam.; ascis cylindricis deorsum sensim tenuato-stipitatis, apice rotundatis, 130 \approx 6-8, parte sporif. 70-80 μ . longa, octosporis; paraphysibus filiformibus ascos multo superantibus; sporidiis oblique monostichis, ovato-oblongis, inæquilateris, 12-14 \approx 5,5-6, fuligineis, crasse 2 guttatis, rarius guttulis inæqualibus 3-4 fœtis.

Hab. in ligno putri in silvis pr. Lyndonville, New York, Amer. bor. — Nonnihil affine *H. nectrioides* Sacc. et Trotter et *H. nectrioidi* Speg. a quibus mox dignoscitur peritheciis applanato-effusis, multo minoribus. Stroma, cui perithecia innituntur est maculiforme, pariter roseo-isabellinum. Species pertinet ad subgenus *Placoxylon*, Sect. a.

26. *Hypoxylon rubigineo-areolatum* Rehm in Theiss., Ann. Mycol. VI 4425 (1908) p. 345. — Æqualiter longe lateque effusum, 1-1 $\frac{1}{2}$ mm.

crassum, vel in glebas dissolutum, primo fusco-crocatum, dein rubigineo-purpureum vel atro-violaceum, ætate nigrescens; peritheciis 500-800 μ . diam. vertice subdepresso delicate papillato, disco interdum applanatulo, anulum minutum efformante; ascis p. sp. 90-115 \times 6-7, pedicello 40-60 μ . longo; sporidiis inter 12-17 \times 5-7 variantibus, oblongis vel plus minus ellipticis, forma inconstanti, rectis curvulisve, 1-2 guttatis, badiis.

Hab. ad ligna emortua corticata et decorticata, Sao Leopoldo, Brasilia. — Species variabilitate omnium fere partium memorabilis. Forma α : Perithecia ad superficiem stromatis non prominula [tota superficie æqualiter plana apparenter compressa] sed angulato-polygonaliter circumscripta; hinc superficies reticulato-areolata. Forma β : Perithecia supra breviter libera regulariter rotundata; hinc superficies æqualiter colliculosa. Forma γ : sicut β , sed papilla annulò distincto circumdata. — Etiam sporidia mox 12-14, mox 13-17 vel 12-17 μ . longa inveniuntur. *Hyp. janthino* Cooke affine. — Var. *microsporum* Theiss., l. c. — Differt a typo ascis 60-70 μ . longis, sporidiis fuliginis 9-11 \times 4,5. — Cum typo.

27. *Hypoxylon amaniense* P. Henn., Engl. Jahrb. XXXVIII (1905) 4426

p. 115. — Stromatibus hemisphærico v. oblongo-pulvinatis, atro-carbonaceis, favoso-rugulosis, 6-12 mm. diam., loculis ellipsoideis v. ovoideis, 400-500 \times 300-350, ostiolis umbilicatis; ascis cylindraceis, 5-5,5 μ . cr., paraphysatis; sporidiis 8 oblique monostichis, longe fusoides, inæquilateralibus, fusco-atris, 18-22 \times 4-5,5.

Hab. in ligno, Amani Ost-Usambara Africæ centr. (EICHELBaum). — *Hyph. annulato* Schw. affine, sed stromatibus hemisphæricis, sporidiis angustis elongatis diversum.

28. *Hypoxylon rosellinoides* P. Henn., Engl. Jahrb. XXXVIII (1905) 4427

p. 115. — Stromatibus ovoideis v. hemisphæricis pulvinatis, carbonaceo-atris, rugulosis, 1- v. plurimis conico-ostiolatis, 1-2 mm. diam., 1- v. plurilocularibus, loculis subglobosis immersis; ascis cylindraceis c. 200 \times 10-15, paraphysatis; octosporis; sporidiis oblique monostichis fusideo-navicularibus, atris, 20-28 \times 10-13.

Hab. in ramis corticatis prope Amani Ost-Usambara Africæ centr. (EICHELBaum).

29. *Hypoxylon epimyces* Speg. An. Mus. Nac. Buenos Aires t. XIX 4428

(1909) p. 344. — Euhypoxylon; stromatibus laxè gregariis superficialibus lenticularibus parvis punctato-verruculosis nigris opacis glabris, intus farctis suberosis albis; peritheciis dense constipatis periphericis, immersis, globosis, minutis, 200-250 μ . diam.; ascis

cylindræcis aparaphysatis, octosporis, $50 \approx 4-5$; sporidiis ellipsoideo-subnavicularibus, levibus, pallide fuliginæis, grosse uniguttulatis $5-7 \approx 2-3$.

Hab. ad pileos *Trametis fibrosæ* in silvis prope Formosa Argentina Amer. austr.

30. *Hypoxylon minutellum* Syd., Ann. Mycol. VIII (1910) p. 37. — 4429
Stromatibus superficialibus rotundatis, applanatis, 3-8 mm. latis, 2-3 mm. crassis, centro affixis, atris, rugulosis; peritheciis ca. 20-50 in disco stromatis immersis, ostioliis prominulis; ascis cylindræcis, mox diffluentibus; sporidiis elliptico-navicularibus, fusco-brunneis, continuis, $6-7 \frac{1}{2} \approx 3-3 \frac{1}{2}$.

Hab. ad corticem, Pauáí alt. 2100 m., in provincia Benguet, Luzon, insul. Philipp. (R. C. Mc GREGOR).

31. *Hypoxylon Berterii* Mont. — Syll. I, p. 367 — var. *microstroma* 4430
Theiss., Ann. Mycol. VI (1908) p. 345. — A typo differt stromatibus minoribus lentiformibus 1-4 mm. diam. orbicularibus v. ellipticis, $1-1 \frac{1}{2}$ mm. altis; ascis 60-70 μ . longis, pedicello usque ad 50 μ . longo; sporidiis opacis obtusulis $11-13 \approx 5-6 \frac{1}{2}$ sæpe irregulariter in asco sparsis.

Hab. ad truncos, Rio Grande do Sul Brasiliæ. — Affinia sunt *Hyp. Dussianum* Pat., *Hyp. cohærens* var. *brasiliense* Starb. et *Hyp. leucocreas* B. et Rav.

32. *Hypoxylon Gilletianum* Sacc., Myc. Cong. novi, Ann. Myc. IV 4431
(1906) p. 76. — Stromatibus e globoso hemisphæricis, superficialibus, hinc inde congregatis, non vel vix confluentibus, 6-8 mm. diam., intus extusque opace nigricantibus, carbonaceis, superficie ob perithecia prominula minute colliculosis; peritheciis globosis, 0,5-0,6 mm. diam., ostioliis punctiformibus areola circulari depressa, 200-300 μ . diam. nitidula cinctis; ascis . . . jam resorptis; sporidiis navicularibus, inæquilateris, utrinque acutiusculis, $19-21 \approx 6-7$, atro-fuliginæis.

Hab. in corticibus emortuis, Kisantu, Africæ (J. GILLET). — Ab *Hypoxylon marginato*, *H. annulato* aliisque speciebus areolato-impressis differt stromatis forma et sporidiis multo maioribus; ab *Hyp. malleolo* stromate multo minore.

33. *Hypoxylon Kellermani* Rehm, Ann. Mycol. VI (1908) p. 313. — 4432
Stromatibus in ligno denudato tuberculariformiter sessilibus, semiglobosis, versus basim constrictis, apice plus minusve truncatis, orbicularibus, glabris, nigris, intus albis, 1-3 mm. diam., 1-1,5 mm. altis, carbonaceis; peritheciis usque ad 12 monostiche innatis.

0,3 mm. diam., papillula minima conoidea prominente; ascis evanidis; sporidiis unicellularibus, subfuscis, 18-20 × 10-12.

Hab. ad ramos decorticatos, Columbus Ohio U. St. Amer. bor. (KELLERMAN). — Ab *Hypoxylo atro-rufa* sporidiis amplioribus imprimis recedit.

34. *Hypoxylon lilliputianum* Syd., Ann. Myc. VIII (1910) p. 37. — 4433

Stromatibus gregariis, rotundatis, ca. 1-3 mm. latis, 1 mm. crassis, primo fusco-brunneis, tandem atris, intus albis, rugulosis; peritheciis ca. 5-25 in disco stromatis immersis, ostioliis prominulis; ascis cylindraceis p. sp. 20-30 × 3-3 1/2, octosporis; sporidiis ellipsoideis, 1-guttulatis, utrinque obtusis, continuis, fuscis, 3 1/2-5 × 2.

Hab. ad lignum cariosum, Davao, Mindanao in ins. Philippinensibus (E. B. COPELAND).

KRETZSCHMARIA Fr. Syll. IX p. 565, XI p. 287, XIV p. 512, XVI p. 449, XVII p. 614.

1. *Kretzschmaria rugosa* Earle, Bull. of the New York Bot. Gard. 4484

(1904) p. 311. — Stromatibus usque ad 1 cm. lat., irregulariter globosis v. subdepressis, breviter stipitatis v. subsessilibus, superficie pallide nigra, rugosa, contextu spongioso-fibroso, albo, stipite 2-8 × 1-2 mm.; peritheciis latis, 1 mm. diam., nigris, globosis, infossis sed prominentibus, monostichis, sparsis, non confertis, ostiolo minuto, punctiformi, inconspicuo præditis; ascis cylindraceis, 150-200 × 8-10, evanescentibus; paraphysibus tenuibus, filiformibus, 1 µ. cr.; sporidiis monostichis, inaequalateralibus, sæpe curvis, primum hyalinis 1- v. 2-guttulatis, dein brunneis, opacis, 25-28 × 8-10.

Hab. in trunco emortuo in silvis, Molyneux Estote, Isl. of St. Kitts Amer. bor. (BRITTON et COWELL).

2. *Kretzschmaria stilbophora* Rehm, Ann. Mycol. V (1907) p. 526. 4485

— Stromate communi late expanso, nigrescente, stilbophoro, crustaceo-membranaceo; stromatibus singularibus arcte congregatis, fere crustaceis, verticaliter constipatis et conglutinatis, obconicis, deorsum angustatis denigratisque, superne convexiusculis, centro papillulatis, primitus strato pruinoso cinereo-argenteo demum deciduo obductis, dein atris carbonaceis, 1 mm. alt., 0,7-0,9 mm. lat., peritheciis oblongis, c. 250 µ. long.; ascis cylindraceis, perlongis, 8-sporis; sporidiis ellipsoideis, subnavicularibus, 1-cellularibus, fuscis, 10-12 × 5, monostichis; paraphysibus filiformibus.

Hab. ad ramum arboris frondosæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.). Stilbum elongatum epistromaticum,

facile deciduum, a cl. Rick observatum, sed a cl. Rehm non amplius repertum.

3. *Kretzschmaria mauritanica* (Dur. et Mont.) Pat., Bull. Soc. Myc. 4436 Fr. XXI (1905) p. 120. — Ita vocanda est *Sphaeria mauritanica* Dur. et Mont. seu *Hypoxylon mauritanicum* Dur. et Mont. — Syll. I, p. 371.

XYLOCREA A. Möll. — Syll. XVI p. 451.

1. *Xylocrea elegantissima* Rick, Broteria V (1906) p. 51. — Stro- 4437
mate carnoso-molli, intus albo, extus albo-stramineo, 0,5 cm. diam., globoso, subsessili; peritheciis atris, oblongo-ovatis, 1-2 mm. diam., eminentibus cinctis disco denigrato stromatis, inter se separatis spatiis 1-3 mm. v. etiam approximatis, aliquoties fere superficialibus; ascis $250 \approx 14$, pedicellatis; sporidiis limoniformibus $25 \approx 12$, versus apicem acutis, longitudinaliter striatis, primitus hyalinis, dein guttulatis, atro-brunneis.

Hab. ad gramina adusta, Rio grande do Sul Brasiliæ. — For-
san non bene distinctum ab *Hypoxylo Phœnice* (Fr.) Berk. et Curt.

PENZIGIA Sacc. — Syll. IX p. 567, XIV p. 513, XVI p. 451.

1. *Penzigia Arntzenii* Theiss., Ann. Mycol. VI (1908) pag. 346. — 4438
Stromatibus minutis, opacis, orbicularibus, 1 mm. diam., depressoglobosis, subtus coarctatis, puncto centrali affixis (pseudo-stipite in sectione verticali distincte visibili), 500-700 μ . altis, mollibus, hypocreaceis, intus farctis candidis, extus brunneis haud nitentibus, sub lente ruguloso-granulosis ostioli paucis nigris vix perspicuis, cortice non duro; peritheciis periphericis, monostichis, immersis, sparsis, minutissimis, 150 μ . diam.; ascis cylindraceis, octosporis, obtuse rotundatis, breviter pedicellatis, aparaphysatis, p. sp. 160-210 \approx 17-21, dilutis; sporidiis atris, continuis, late ellipticis, utrinque acutatis v. rotundioribus, gutta una magna præditis, 30-35 \approx 12-15.

Hab. ad ramulos siccos plantæ scandentis in silva, Sao Leopoldo Brasiliæ. — Ab *Engleromycete* differt peritheciis monostichis, ascis aparaphysatis et cortice non duro. Ab *Hyp. quisquiliarum* Mont. et *Hyp. chionostomo* Speg. omnino diversum. An huc pertineat *Hyp. paucillum* Ces., dubium est. — E sect. *Sarcoxylon*.

2. *Penzigia Schiffereri* v. Höhn., Fragm. Mykol. VII (1909) in Sitzb. 4439
k. Ak. d. Wissensch. Wien, CXVIII Abt. I, p. 827. — Stromatibus sessilibus, depressoglobosis, basi contractis, 27 mm. latis, 13

mm. altis, sordide brunneis senioribus nigricantibus, opacis, levibus; crustis fragilibus, carbonaceis, 350-450 μ . cr., extus regulariter reticulatis; ostioliis minutis, hemisphaericis, in verrucis minutis depressis insidentibus; peritheciis ovoideo-angulosis, fragilibus, 2 mm. altis, 1,8 mm. latis, nigris; contextu stromatico molli, spongioso radiatim fibroso, non stratoso v. zonato; ascis et paraphysibus solutis; sporidiis nigris, opacis, cylindraneo-fusoideis, apice acutis v. obtusulis, rectis v. curvulis, 26-36 \times 6,5-9.

Hab. in ligno putri Batavia in ins. Java. — *Penz. compunctæ* (Jung.) et *P. fusco-areolata* Rehm affinis.

3. *Penzigia fusco-areolata* Rehm, Ann. Mycol. V (1907) p. 527. — 440

Stromatibus hemisphaericis vel oblongis, sessilibus, depressis, brevissime stipitatis, stipite 1-2 mm. long. et cr., integris, nec lobulatis, nec undulatis, glabris, extus subfuscis, supera parte lineolis atris tenuissimis areolata, 1-1,5 cm. diam., 0,7 cm. altis, subcarbonaceis; peritheciis in stromatis superiore parte nigris, 1 mm. altis, monostichis, globulosis, in quaque areola papillula 1-2 conoidea, atra, prominente, poro perspicuo pertusis; stromate intus albo, stratoso fibroso; ascis cylindraneis, octosporis; sporidiis fusiformibus, plerumque subnavicularibus, 1-cellularibus, fuscis, monostichis, 12 \times 5.

Hab. ad lignum putridum, Sao Leopoldo, Rio grande do Sul, Brasilia (Rick S. J.). — Affinis *P. compunctæ* sed minutie stromatis omnino distincta.

4. *Penzigia Polyporus* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 441

Arkiv f. Bot. Bd. V (1905) p. 32, fig. 24. — Stromatibus pileatis, polyporoideis, applanatis, laccatim nigro-cuticulatis, concentricè sulcatis, centro tuberculatim affixis vel latius matrice adnatis, margine acutiusculo, pulvinatis, undulatim inæqualibus, fusco-furfuraceis, ambitu paullum lobatis, 2-5 cm. diam., circa 1 cm. crassis (specimen maximum 5,5 \times 3,5 \times 1 cm.), textura stratus corticalis carbonacea, intus suberosa, radiante, sericeo-nitida; peritheciis monostichis, cylindraneo-elongatis, mutua pressione angulatis, non prominulis, vix ostiolatis, carbonaceis, circ. 1 mm. altis, $\frac{1}{4}$ mm. diam.; ascis resorptis; sporidiis ellipsoideis, inæquilateralibus plerumque biguttulatis, 7,5-13 \times 3,8-5.

Hab. in trunco humi jacente, pr. Laguna de la Brea, prov. Jujuy, Argentina. — Species perpulchra ad instar Sterei vel Polypori resupinati pileata, textura intus suberosa, radiante, sericeo-nitente, non zonata, recte *Penzigiæ* adscribenda.

5. *Penzigia seriata* Theiss., Ann. Mycol. VI (1908) p. 347. — Stro- 4442
matibus cæspitose erumpentibus, in pulvinulos exquisite lobatos
confluentibus, 1 cm. circ. diam. vel seriatim dispositis, serie sim-
plici ex stromatibus 10-25 composita v. binis parallelis; stromatibus
seriatis, mutua pressione e latere compressis, 2 mm. altis, 3 mm.
diam., a latere 1-1 $\frac{1}{2}$ mm., deorsum ad modum stipitis attenuatis
v. margine involuto distincte licet brevissime stipitatis; extus pri-
mo coccineo-rubiginis, dein brunnescentibus vel fere nigris, pul-
verulentis, levibus, cuticula et contextu molliuseculis, intus fusco-
fuliginis; peritheciis periphericis, monostichis, immersis, globosis,
minutis, stipatis, ostiolis ætate demum sub lente mammillose ni-
gro-prominulis; ascis cylindraceis, breviter pedicellatis, p. sp. 70-
90 \approx 6-7; sporidiis octonis, oblongis, monostichis, lætius fuliginis,
guttis 2 specie septatis, 11-13 $\frac{1}{2}$ \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$.

Hab. ad cortices in silva, Petropolis Brasilæ (J. RICK S. J.).

— Comparanda cum *Hyp. ceramichroo* B. et Br.

6. *Penzigia sessilis* Theiss., Ann. Mycol. VI (1908) p. 347. — Stroma- 4443
tibus sessilibus, depressis, atris, placentiformibus, 2-4 mm. d., 1-2
mm. altis, subtus coarctatis; modice confluentibus, cute dura car-
bonacea, intus primo albo-farctis, radiato-fibrosis, mox lignescen-
tibus ac demum erosio carbonaceis, superficie æquali, levi, opaca,
non nitida nec rugosa, ostiolis imperspicuis; peritheciis ovato-glo-
bosis, periphericis, monostichis, immersis, stipatis, 500-900 μ . diam.
carbonaceis; ascis dilutis, cylindraceis, 140-170 μ . longis; sporidiis
opacis, utrinque acutis vel saltem angustatis, rectis vel plano-con-
vexis, inter 28-38 \approx 7-12 variantibus, typice 30-32 \approx 9-10.

Hab. ad lignum corticatum in silva, Sao Leopoldo, Brasilia.

DALDINIA De Not. et Ces. — Syll. I p. 393, XI p. 288, XVI p. 449,
XVII p. 616.

1. *Daldinia corrugata* Pat. et Har., Bull. Soc. Myc. Fr. XXII (1906) 4444
p. 120. — Minuta 5-10 mm. lata (rarius 20 mm.), gregaria; stromate
subgloboso, brunneo-atro, carbonaceo, glabro, superficie plicato-
corrugata, ostiolis vix punctato, intus albido zonis concentricis
brunneis numerosis notato, crustula tenui, atra insidente; perithe-
ciis periphericis immersis, ovoideis; sporidiis ellipsoideis, fuliginis,
rectis, 9 \approx 4.

Hab. ad lignum in Africa orientali (Herb. Mus. Paris.).

2. *Daldinia platensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4445
(1909) p. 345. — Stromatibus hinc inde laxè gregariis subhemi-

sphaericis 1-2 cm. diam., 6-7,5 mm. alt., duris carbonaceis, atris opacis levibus v. vix colliculosis, intus dense concentrice crassiusculeque septatis, interstitiis medulla fibrillosa cinerea repletis; peritheciis periphericis dense constipatis non prominulis obsolete sime minutissimeque papillato-ostiolatis, obpiriformibus 0,75 mm. alt., 0,50 mm. diam., nigris, coriacellis; ascis cylindraceis longissime pedicellatis, paraphysatis, 170-200 \times 8; sporidiis navicularibus 8-10 \times 5, non v. minute biguttulatis, fuligineis.

Hab. ad truncos dejectos putrescentes in umbrosis Parque de La Plata Rep. Argentina, Amer. austr. — *Dald. concentrica* affinis, sporidiis minoribus notisque nonnullis aliis distincta videtur.

3. *Daldinia granulosa* Speg., An. Mus. Nac. Buenos Aires t. XIX 4446 (1909) p. 345. — Solitaria v. hinc inde subcæspitosa, nigra; clavulis e cylindraceo clavulatis 1,5-4 cm. long., 8-12 mm. diam., apice obtusis ubique fertilibus, dense minuteque granulosis, stipite glabro; peritheciis globulosis 400-600 μ . diam., carbonaceis obsolete sime ostiolatis; ascis cylindraceis mox diffluentibus; sporidiis eximie navicularibus, 8-11 \times 6, opace fuligineis.

Hab. ad truncos putridos in silvis secus Rio Pescado, Jujuy Rep. Argentina Amer. austr.

4. *Daldinia argentinensis* Speg. — Syll. XVII, p. 616 — var. *sessilis* 4447 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 345. — A typo stipitis defectu recedit.

Hab. ad ramos dejectos putrescentes in silvis secus Rio Pescado Argentina Amer. austr.

5. *Daldinia barbata* Rick, Broteria V (1906) p. 50. — Stromate pulvino, usque ad 5 cm. diam., sæpe lateraliter ad modum *Fomitis* protracto, ferrugineo-purpureo, pruinato; ascis pedicellatis, parte spor. 50 \times 6; sporidiis atro-fuligineis, curvulis, 10 \times 4, uniserialibus, paraphysibus filiformibus.

Hab. ad truncos Rio grande do Sul Brasiliæ. — Exsiccano et jam in statu naturali tegitur totus fungus filamentis multis atris, longissimis, ex sporarum massa formatis, hinc barbatus.

6. *Daldinia stratosata* Sacc. Ita nuncupandum *Hypoxylon stratosum* Sacc. — Syll. IX, pag. 544 — a *Daldinia Escholtzii* (Ehrenb.) Behm — Syll. XVII, p. 617 — præsertim sporidiis fere dimidio angustioribus distinguendum.

NUMMULARIA Tul. — Syll. I p. 395, IX p. 569, XI p. 288, XIV p. 513, XVI p. 1129, XVII p. 618. — Teste P. Theissen in Ann.

Mycol. VI p. 92 (1908) *Diatrypeopsis saccata* Speg. — Syll. IX, p. 480 — collidit cum *Nummularia punctulata* (B. et Br.) Sacc.

1. *Nummularia philippinensis* Ricker, A List Philipp. Fungi in Phil. Journ. of Science, I, Suppl. IV (1906) p. 280. — Stromate primum epidermide tecto sed mox erumpenti et libero, convexo, oblongo-ovato, nigro, 4-6 \times 1,5-2,5 cm.; peritheciis cylindricis, nigris, arcte stipatis, 1,5 mm. circ. alt.; ascis cylindraceutis, 170-185 \times 12-15; sporidiis monostichis, ellipsoideo-oblongis, primum subhyalinis sed mox opacis, 25-28 \times 11-14.

Hab. in ligno humifuso, Luzon, Prov. Bataan, Lamao, in ins. Philippin. (MERRILL).

2. *Nummularia Artocarpi* Pat., Bull. Soc. Myc. France XXII (1906) p. 56. — Stromate peridermio nigricante emergente fere superficiali liberoque, orbiculari, 3-8 mm. diam., 1-2 mm. cr., plano v. depresso, obtuse marginato, inferne attenuato, brunneo-atro, intus albo; peritheciis stromate immersis, numerosis, monostichis, ovoideis, ostioliis poro angusto pertusis haud prominentibus; ascis cylindraceutis, stipitatis, 8-sporis, parte spor. 75 \times 8, filiformi-paraphysatis; sporidiis brunneis, ovoideis, simplicibus, sæpe inæquilateralibus, biguttulatis, 10-12 \times 5-6.

Hab. in cortice *Artocarpi* speciei indeterminatæ in Polynesia.

3. *Nummularia luteo-viridis* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 58. — Stromatibus cortice immersis v. disco nitido nigro 2-3 mm. lato ex ostioliis asperato, erumpentibus, cortici arcte adnatis, globosis, piriformibus vel cuboideis 3 mm. altis, extus mycelio flavo-viridi vestitis, solitariis v. pluribus aggregatis; ligni superficie viridi-flava; peritheciis pluries seriatis, globosis v. piriformibus, sæpe ob mutuam pressionem irregularibus; ascis tenuibus, octosporis, cylindraceutis, supra rotundatis, basi in pedicellum acutatis, 50 \times 5; sporidiis late ellipsoideis, oblique monostichis vel irregulariter distichis, primum biguttulatis, unilocularibus, griseo-brunneis, 4-5 \times 2; paraphysibus hyalinis, numerosissimis, filiformibus, guttulatis, ascos superantibus.

Hab. in ramis putrescentibus *Quercus* sp. prope Rathenow Germaniæ. — *N. lutea* (Alb. et Schw.) affinis sed magnitudine et stromatis structura diversa.

4. *Nummularia oospora* Vouaux, Bull. Soc. Mycol. Fr. XXVI (1910) p. 155. — Stromate basi ligno innato, peridermio immerso, disco erumpente, postea in ligno decorticato superficiali, orbiculari vel ovali, 5-10 mm. longo 2-3 mm. cr., toto nigro; disco cupulato

ostiolisque peritheciorum punctulato; peritheciiis numerosis, densissime stipatis fereque cylindricis; ostiolis brevibus, poro angusto pertusis, vix prominulis; ascis non visis; sporidiis late ovoideis, fuscis, opacis, $16 \approx 11$.

Hab. in ligno putrescente, Nouméa, Nova Caledonia (CACOT). 4453

— A *Num. macrospora* Pat. sporidiis multo minoribus distincta.

5. *Nummularia gracilentia* Syd., Ann. Mycol. VIII (1910) p. 37. — Stromatibus determinatis, orbicularibus, planis, immersis, $\frac{1}{2}$ -1 cm. diam., ca. $\frac{1}{2}$ mm. crassis, duris atris; peritheciiis sphaeroideis, immersis, 200-250 μ . diam.; ostiolis minutissimis, punctiformibus, vix elevatis, atris; ascis cylindraceis, p. sp. 40-50 \approx 3, octosporis; sporidiis monostichis, ellipsoideis vel inæquilateralibus, continuis, fuscis, 4-5 \approx 2 $\frac{1}{2}$ -3.

Hab. in ramis emortuis corticatis in silva Dumaguete, Cuernos 4454 Mts., Province of Negros oriental, Talumtum (A. D. E. ELMER).

6. *Nummularia asarcodes* Theiss., Ann. Mycol. VI (1908) p. 349. — Stromatibus applanatis tenuibus, vix 1 mm. crassis, irregulariter discreto-effusis, sinuosis, cortice arcte cinctis, margine recto, superficie primo griseis atro-punctatis, dein plumbeo-fuligineis nigrescentibus, sordide pulverulentis, ætate subnitentibus, ostiolis pertusis annulatis vix perspicuis, intus carbonaceo-duris; peritheciiis oblongo-ellipsoideis, 700 \approx 300, stipatis; ascis p. sp. 80-90 \approx 6-7; sporidiis ellipticis, rotundatis, opacis, 11-13 $\frac{1}{2}$ \approx 6-6 $\frac{1}{2}$.

Hab. ad truncos vetustos corticatos, Sao Leopoldo Brasiliæ. — Secundum Rehm *N. Bulliardi* affinis, colore griseo-plumbeo tamen diversa; præterea differt stromatibus tenuibus applanatis sporidiisque minoribus.

7. *Nummularia Bulliardi* Tul. — Syll. I, p. 396 — *Nummularia anthracina* (Schw.) — Var. *tiliæcola* Rehm, Ann. Mycol. VII (1909) pag. 532. — Stromatibus emergentibus, cortice demum delapso primitus marginatis, 10-20 cm. long., 1-3 cm. latis, cinereo-nigris, versus marginem subalbidulis, subrugulosis, ostiolis minutissimis haud prominentibus punctulatis; ceterum ut in *N. Bulliardi*. 4455

Hab. in truncis *Tiliæ americanæ*, Riverside Illinois Amer. bor. (E. T. et S. A. HARPER). — Var. *stenosperma* Theiss., Ann. Mycol. VI (1908) p. 350. — Irregulariter oblongo-effusa vel exquisitè interrupte sinuosa, aterrima pulverulenta, ostiolis pertusis minutis vix elevatis signata; ascis breviter pedicellatis p. sp. 65-85 \approx 6-7; sporidiis fusco-brunneis ellipticis 9-13 \approx 5-6 $\frac{1}{2}$. — Ad truncos in Brasilia.

8. *Nummularia cincta* Ferd. et Winge, Botanisk Tidsskr. XXIX 4456 (1908) p. 15, tab. II, fig. 1. — Stromate per corticem erumpente ejusque laciniis erectis arcte cincto, pulvinato vel placentiformi, margine angusto, tumidulo, circuitu orbiculari v. parum elongato, 2-6 cm. (et ultra?) diam., 2-15 mm. cr., fusco, intus concolori, textura subcoriacea; peritheciis periphericis, monostichis, dense stipatis, cylindraceis v. subovoideis, circ. 1 mm. long., $\frac{1}{6}$ - $\frac{1}{2}$ mm. cr.; ostiolis minutissimis, oculo nudo vix conspicuis, discoideo-papillulatis, poro lato pertusis, in speciminibus vetustis oblitteratis; ascis lineari-cylindraceis, apice rotundatis, in pedicellum longissimum, fragilem leviter attenuatis, parte sp. 95-105 \approx 6-7, poro jodo cærulescente; sporidiis octonis, monostichis, ellipsoideis v. ellipsoideo-fusiformibus, verrucosis, 13-15 \approx 5-6,5, singulatim brunneo tinctis, acervatis brunneis; paraphysibus validis, septatis, basi circ. 6 μ . cr., sursum leniter attenuatis, ascos longe superantibus.

Hab. ad ramos corticatos in insulis Hispaniola et St. Jan Indiae occ. (RAUNKIAER).

9. *Nummularia clypeus* (Schw.) Cooke — Syll. IX, p. 570 — var. 4457 *macrospora* Theiss., Ann. Mycol. VI (1908) p. 349. — Stromatibus discretis 3-8 mm. diam., convexo-planis vel latius confluentibus et magis applanatis, sæpe lineari-elongatis, nitentibus; ascis 140-165 \approx 10-12 p. sp.; sporidiis 22-28 \approx 10-12.

Hab. in truncis ramisque corticatis, Sao Leopoldo, Brasiliæ.

10. *Nummularia commixta* Rehm — Syll. XVII p. 618 — Var. ap- 4458 *planata* Theiss., Ann. Mycol. VI (1908) p. 35; VII (1909) p. 13. — Differt a typo stromatibus æqualiter applanatis non convexis, vix 600 μ . crassis, aterrimis, nitentibus, ostiolisque non impressis, superficiem æqualiter hemisphærice punctulantibus (sine fossulis); stromatibus 3-30 mm. diam.; ascis breviter pedicellatis p. sp. 200-220 \approx 10-12; sporidiis hyalinis utrinque attenuatis 25-32 \approx 7,5.

Hab. ad ligna dura corticata, Sao Leopoldo Brasiliæ. — Var. *minor* Rehm ap. Theiss. in Ann. myc. VII (1909) p. 13. — Differt stromatibus minoribus 3-10 mm. diam., absentia fossularum in disco sporidiisque minoribus 20-26 \approx 7-9, hyalinis. — Cum var. præcedente.

11. *Nummularia diatrypeoides* Rehm, Ann. Mycol. V (1907) p. 527. 4459 — Stromatibus gregariis, ramulum ambientibus, primitus innatis, dein per corticem erumpentibus ab eoque tenuiter marginatis, orbicularibus, rarissime oblongis, supra corticem exstantibus, in ligno linea nigra circumscriptis, sessilibus, planis, atris, carbonaceis,

2-3 mm. diam.; peritheciis c. 12 innatis, monostichis, globulosis, 0,3 mm., papillis in stromatis superficie vix conspicuis; ascis subcylindræis, tenerrimis, c. 180 × 50 octosporis; sporidiis ellipsoideis, 1-cellularibus, subfuscis, strato tenuissimo mucoso obductis, 35 × 20, 1-2-stichis; paraphysibus filiformibus septatis, 5-6 μ . crassis.

Hab. ad ramum, Rio grande do Sul, Brasilia (RICK S. J.). —
Habitus omnino Diatrype.

12. *Nummularia divergens* Theiss., Ann. Mycol. VI (1908) p. 349. — 4460

Stromatibus in ligno denigrato orbicularibus 4-10 mm. diam. vel irregulariter expansis, nigro-brunneis, convexo-planis, margine indistincto, vix 1 mm. crassis, superficie sub lente granuloso-asperulis, ostiolis hemisphæricis minutis sparse punctulatis, carbonaceo-duris; peritheciis minutis, stipatis, ovatis, durissimis; ascis non visis; sporidiis atris, continuis, urceolatis, hinc recte truncatis, illic rotundato-angustatis, appendicula hyalina præditis, irregulariter guttulatis, laciniis mucosis tectis, 17-23 × 6-8,5.

Hab. ad truncos corticatos, Sao Leopoldo Brasiliæ.

13. *Nummularia dura* Ferd. et Winge, Botanisk Tidsskr. XXIX 4461

(1908) p. 15, tab. II, fig. 2. — Stromate per corticem erumpente, plano, supra superficiem corticis vix surgente, margine sterili, tecto, ambitu fere orbiculari, 1,5-3 cm. (et ultra ?) diam., tenuissimo, intus extusque nigerrimo, glabro, foveolis irregulariter dispersis circ. 2-3 mm. diam. instructo, textura carbonacea, durissima, picem aridam in memoriam revocante; peritheciis monostichis, densissime constipatis, tubularibus, $\frac{3}{4}$ -1 mm. long., circ. $\frac{1}{5}$ mm. cr.; ostiolis pustuliformibus, minutissimis, lente sola conspicuis; ascis cylindræis, apice rotundatis jodoque cærulescentibus, breviter pedicellatis, parte sp. 125-135 × 7,5-8; sporidiis octonis, monostichis, e dorso oblongo-ellipsoideis v. ellipsoideo-fusoideis, e latere inæquilateralibus v. navicularibus, nonnullis subcurvatis, 18-22 × 6,5-7,5, pellucido-fuscidulis; paraphysibus filiformibus, longis, sursum attenuatis, guttulatis.

Hab. ad lignum corticatum arborum in insulis St. Croix et St. Thomas Indiæ occ. (RAUNKIAER).

14. *Nummularia Fuckelia* Theiss., Ann. Mycol. VI (1908) p. 350. — 4462

Stromatibus erumpentibus, primo cortice cinctis, dein subsuperficialibus pulvinato-liberis, orbicularibus, 2-6 mm. diam., 1-1 $\frac{1}{2}$ mm. crassis, margine fusco oblique adscendente, disco atro rotundato-applanato vel obsolete marginato, levi, vix sub lente ostiolis cre-

berrimis annulatis minutissimis notato; peritheciis stipatissimis, ovato-angulatis, durissimis, 200-300 μ . diam.; ascis p. sp. 95-110 \times 6; sporidiis hyalinis utrinque acutis, rectis vel plano-convexis, 12-15 \times 5-5 $\frac{1}{2}$.

Hab. ad cortices, Sao Leopoldo Brasiliæ. — Ad gen. *Anthostoma* quoque vergit. Ubi sporidia jugiter hyalina, vix *Nummularice* species.

15. *Nummularia maculata* Theiss., Ann. Mycol. VI (1908) p. 348. — 4463

Stromatibus determinatis, orbicularibus vel plus minus irregulariter ellipticis, rarius confluentibus, 3-15 mm. diam., rarissime lineari-elongatis, planis vix pulvinatis, $\frac{1}{2}$ -1 mm. cr., primo griseis, dein fusco-griseis, maculis orbicularibus nigro-pulveraceis, ætate confluentibus conspersis, margine nigro acutiusculo, intus primo cinereis, ætate atris, non duris; peritheciis oblongo-cylindricis cum ovalibus mixtis, ostioli in mediis maculis sitis, pertusis, minimis; ascis cylindræis p. sp. 45-58 \times 3 $\frac{1}{2}$ -4, pedicello 30-90 longo μ .; sporidiis griseo-fuscellis oblongis, biguttulatis, rotundatis 5 $\frac{1}{2}$ -7 \times 2-2 $\frac{1}{2}$.

Hab. in ligno emortuo corticato, Sao Leopoldo, Brasilia. — Affinis *N. Møllerianæ* P. Henn.

16. *Nummularia punctato-brunnea* Theiss., Ann. Mycol. VI (1908) 4464

p. 348. — Stromatibus orbicularibus vel plus minus irregulariter ellipticis, subpulvinatis vel planis, 2-8 mm. diam. $\frac{1}{2}$ -1 mm. cr., margine indistincto sterili, superficie testacea, ætate sordide brunnea v. nigrescente, ostioli atris, punctiformibus vix elevatis, pertusis picta, intus atris, non duris; peritheciis immersis ovalibus 500-700 μ . diam.; ascis p. sp. 50-60 \times 4-5, pedicello elongato usque ad 100 μ .; sporidiis ellipticis rotundatis, sordide fuscis, 6-8,5 \times 2,5-3,5.

Hab. in ligno corticato, Sao Leopoldo Brasiliæ. — *Num. maculatæ* valde affinis; vetusta vix discernenda; specimina typica vero margine indistincto, defectu macularum facile distinguenda. Secundum Rehm insuper differentia constat in eo quod porus ascorum jodo cærulescit, non vero speciei præcedentis. — Var. *variabilis* Theiss. l. c. Differt a typo colore fuligineo-brunneo sporidiisque fuligineis variabilibus, typice 8-9 \times 4, sæpius in ascis usque 15-18 μ . elongatis intermixtis regularibus. — Cum typo.

17. *Nummularia pezizoidea* P. Henn. — Syll. XVII p. 618. — var. 4465

fuliginea Theiss., Ann. Myc. VII (1909) p. 12. — A typo differt

superficie non atro-nitente sed pulverulento-fuliginea, habitu magis quam characteribus diversa.

Hab. ad truncos in Brasilia Americæ austr.

18. *Nummularia sinuosa* Theiss., Ann. Mycol. VI (1908) p. 349. — 4466
Stromatibus aterrimis, pulverulento-opacis, orbicularibus 2-5 mm. diam. in figuras exquisite interrupte sinuosas confluentibus, vix 1 mm. crassis, margine acute determinato, intus durissimis, atris; peritheciis ovatis, angulatis, minutis, parietibus durissimis, nitentibus, stipatis; ostioliis depressis minutissimis vix perspicuis; ascis p. sp. 140-170 \times 10-12, pedicello brevissimo; sporidiis atris utrinque subacutis, grosse 1-guttatis, 28-35 \times 9-11.

Hab. in ligno duro corticato, Sao Leopoldo Brasiliæ.

19. *Nummularia Theissenii* Syd. in Theissen, Ann. Mycol. VII (1909) 4467 p. 344. — Stromate epidermide fusco-brunnea primo tecto, late effuso, continuo v. formis exquisitis sinuoso-interrupto et labyrinthiformi, juventute fusco-atro, glabro, subnitenti, ætate pulverulento-opaco, piceo-atro, semper acute marginato, applanato, vix 1 mm. cr., ostioliis vix conspicuis, ætate griseo-punctiformibus pertusis; peritheciis stipatissimis, contextu duro, nigro-nitenti, ovato-polygonatis, minutis; ascis cylindraceis, breviter pedicellatis, supra rotundatis, 8-sporis, p. sp. c. 85-110 \times 7-8; pedicello 12-35 μ . longo; sporidiis monostichis, fusco-brunneis, ellipsoideis v. oblongis, utrinque angustato-rotundatis, rectis, irregulariter (typice 2-) guttulatis, 12-18 \times 5-6,5.

Hab. in corticibus Sao Leopoldo Rio Grande do Sul, Brasilia.

— *Numm. anthracodi* (Fr.) Cooke affinis.

20. *Nummularia viridis* Theiss., Ann. Mycol. VI (1908) p. 350. — 4468
Stromatibus flavo-viridulis, dein viridi-fuligineis, margine lætiore flavidulo, tenuissimis, vix 400 μ . crassis, ambitu orbiculari 5-10 mm. diam., rarius confluentibus, planis, non elevatis, superficie ostioliis atris minutis punctata, contextu molliusculo; peritheciis penitus immersis, ovatis, atris c. 250 μ . diam.; ascis gracilibus cylindraceis p. sp. 60-75 \times 5-6 $\frac{1}{2}$, pedicello 35-55 μ . longo; sporidiis obscure brunneis, biguttulatis, ellipticis, rectis, 6 $\frac{1}{2}$ -9 \times 3-3 $\frac{1}{2}$.

Hab. ad ligna subputrida in locis periodice inundatis (« banha-dos » dictis) Sao Leopoldo Brasiliæ. — Linea viridis per lignum excurrit.

21. *Nummularia Starbäckii* Sacc. et Trav. — Syll. XX, p. 203 — 4469
Nummularia tenuis Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 31, fig. 23 a-b, non Pass. — Stro-

matibus sparsis vel gregariis, interdum confluentibus, plane irregulariter determinatis, plerumque longitudinaliter attenuatis, margine arcuato vel lobato, tenuissimo, peridermio vix protuberante, lilacino-griseo, rugosiusculo diu tectis, denique, illo secedente, nigris, superficie tota eleganter parallele striata, tenuissima, textura carbonacea, latiuscule effusis; peritheciis monostichis, dense constipatis et mutua pressione difformibus, plerumque sphærioideo-oblongatis, ostiolis discoideo-conicis, sæpe umbilicatis vel acutiuscule et gibberose marginatis, fere patelliformibus sparsim prominentibus, minutis; ascis octosporis, cylindraceis, sursum rotundatis vel rotundato-detruncatulis, plus minusve unifoveolatis, fere sessilibus, $100 \approx 8-9$; jodi ope areola cuboidea sursum cærulescente; sporidiis monostichis, ellipsoideis, utrinque plerumque acutiusculis, interdum rotundatis, sæpe guttulatis, fuscis, $12-14 \approx 6-7,5$; paraphysibus vix ramosis, filiformibus, ascos superantibus.

Hab. in ramis humi jacentibus pr. Laguna de la Brea, prov. Jujuy, Argentina et in Gran Chaco Boliviae. — Quoad habitum cum *N. microplaca* et *N. hypophlæa* valde congruens, partibus internis autem satis differt; a *N. exutante* cui maxime affinis, forma stromatum, peritheciis satis diversa.

USTULINA Tul. — Syll. I p. 350, IX p. 542, XI p. 285.

1. *Ustulina microsperma* Trav., Fl. it. crypt. Pyren. (1906) p. 37 (ex 4470 err. *U. microspora*). — Stromate superficiali, subeffuso, irregulariter convexo-pulvinato, undulato, 2-3 cm. et ultra diam., 2-10 mm. cr., carbonaceo-fragili, extus æneo-nigricanti, intus nigro; peritheciis majusculis, globoso-ovoideis, 1 mm. usque diam., monostichis, stipatis, crusta stromatica crassa tectis; ostiolis prominulis, punctiformibus, obtusiusculis; ascis cylindraceis, pedicellatis, p. sp. $90-100 \approx 7-8$, paraphysibus filiformibus paucis obvallatis; sporidiis oblique monostichis, ellipsoideo-fusoideis, sæpe parum inæquilateris, nigricantibus, $14-16 \approx 5-6$, guttulatis.

Hab. ad corticem *Quercus*, Selva Pisana et Apennino Pi-stojese Italia centr. — Ab *U. maxima* (Web.) Wetts. pluribus notis diversa.

2. *Ustulina pyrenocrata* Theiss., Ann. Mycol. VI (1908) p. 347. — 4471 Late pulvinato-effusa, e fusco lurido-nigra, durissima, intus æneo-nitens, stratis tribus distinctis: basali compacto atro-nitente, superiore verticaliter fibroso, medio pyrenophoro rufo-brunneo fibroso; superficie ætate eroso-perforata; peritheciis maximis, irre-

gulariter depressis, cylindraceo-globosis, 3-5 mm. altis et latis, extus luride brunneo-sericeo-vestitis, parietibus durissimis atris nitentibus, ostiolo angusto stratum corticale perforante, intus massa glutinosa fartis; ascis non observatis; sporidiis giganteis, atris, continuis, ellipticis, utrinque rotundatis, junioribus 35-60 \times 20-25, vetustioribus 70-110 \times 40-55 variantibus. [Intermixtæ inveniuntur sporæ hyalinæ continuæ elongatæ, rectæ vel curvulæ, guttulatæ, 20-24 \times 6-7].

Hab. ad corticem crassum in silva, Sao Leopoldo Brasilia (Dr. RICK S. J.). Recedit ab *Ustul. macrosperma* (Mont.) Sacc. forma late pulvinato-effusa, peritheciis non oblongis sporidiisque majoribus non cymbiformibus. A typo generis nonnihil recedens.

3. *Ustulina maxima* (Weber) Wettst. in Verb. zool.-bot. Gesellsch. 4472
Wien (1885) p. 592. — Ita vocanda, prioritatis causa, *Sphaeria maxima* Weber, *Ustulina vulgaris* Tul. — Syll. I, p. 351.

PORONIA Willd. — Syll. I p. 348, IX p. 542, XI p. 285, XVI p. 451, XVII p. 620.

1. *Poronia ? cælata* Pat., Bull. Soc. Myc. de Fr. XXII (1906) p. 57. 4478
— Stromate erecto, simplici, stipite subcylindraceo, 7 cm. longo, apice 1 mm. cr., basim versus regulariter incrassato, longitudinaliter striato, vix squamuloso, inferne villosa, extus sordide brunneo, intus flavescens, apice in discum placentiformem, 6 mm. diam. lutescentem superficie cælatum dilatato; contextu subcitrico, molli, ex hyphis 10 μ . latis formato; peritheciis sporidiisque non visis.

Hab. in ligno putrido, Tahiti Polynesia.

2. *Poronia macrospora* Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4474
p. 220. — Stromate 0,75-1,5 cm. lato, irregulari, late ovoideo v. depresso globoso, stipitato, ostiolis nigris v. nigricantibus leniter prominentibus punctato, rubro-brunneo v. nigro-brunneo, intus albo; stipite irregulari, flexuoso, angusto, simplici v. apice parce subramoso ibique sæpe incrassato, basi crispato-tuberculato et perforato, brunneo-nigro, intus albo; peritheciis immersis, nigris, ostiolis pallidioribus; sporidiis magnis, ellipsoideis, primum hyalinis et muco involutis, pallide coloratis, 40-60 \times 20-30.

Hab. in sabulosis in horto, New Haven Connect. Amer. bor. (P. W. GRAFF).

STILBOHYPOXYLON Theiss. Ann. Mycol. VI (1908) p. 344 (Etym. *Stilbum* et *Hypoxylon*). — Stroma conidiophorum subulatum, stilbiforme; stroma ascophorum subglobosum sessile v. substipitatum ad basim stromatis conidiophori (quod interdum ascophorum percurrit et apice mucronatum reddit). Asci octospori elongati; sporidia ellipsoidea, continua, brunnea.

1. **Stilbohoxylon Rehmii** Theiss., Ann. Mycol. VI (1908) p. 344. — 4475
Stromate conidiophoro subulato usque ad 2 mm. alto, basi atra subdilata, sursum cinereo-pallido, apice æquali vel subcapitato; stromate pyrenophoro globoso sessili vel subtus stipitiformini-atenuato, 700-950 μ . diam. vel depresso 600 μ . alto, atro-griseo, rugoso v. verruculoso, intus subcarnoso candido, apice (stromate olim conidiophoro percurrente) breviter mucronato, ostiolis atris vix perspicuis; peritheciis paucis, minimis, sparsis, immersis, atris; ascis cylindricis p. sp. 75-100 μ . longa, pedicello 35-50 μ . longo; sporidiis octonis brunneis, subdistichis, ellipticis, continuis, obtusis vel hinc inde subapiculatis, gutta una magna vel pluribus præditis, 16-22 \times 7-9.

Hab. in ramulis emarcidis plantæ scandentis in silva, Sao Leopoldo, Brasilia.

SPIROGRAMMA Ferdin. et Winge, Vidensk. Meddel. fra den naturh. Foren. Kiøbenhavn (1908) p. 142 (Etym. ex lineola spirali sporidiorum). — Stroma subpulvinatum, per corticem erumpens, strato externo tenui, carbonaceo, fusco-nigro, intus medullaceum, niveum; perithecia in singulo stromate pauca, medulla nivea immersa, ostiolis vix exsertis prædita; asci 8-spori, paraphysati; sporidia forma gen. *Hypoxyli*, eseptata, maturitate fusca, lineola spirali (germinationis?) lucida circumscripta. — Genus habitu fere sectionis *Clitoxyli*, generis *Hypoxyli*, ad *Xylariam* reapse propius accedens, characteribus autem distinctis, partim sporidiorum, partim stromatis satis diversum.

1. **Spirogramma Boergesenii** Ferdin. et Winge, Vidensk. Meddel. fra 4476 den naturh. Foren. i. Kiøbenhavn (1908) p. 143, tab. IV, fig. 3. — Stromatibus ligno insidentibus, per corticem erumpentibus, semigloboso-pulvinatis, rugulosis, ad basim constrictulis, densiuscule, nonnumquam subseriatim dispositis, raro 2-4 confluentibus, strato externo tenui, carbonaceo, fusco-nigro, intus medullaceis, niveis, 1-2 mm. diam. ad 1 mm. alt.; peritheciis in singulo stromate 2-6, in medulla interiore immersis, pro ratione maximis, globosis, in-

terdum mutua pressione angulatis, circ. $\frac{1}{2}$ mm. diam, submonostichis, nonnumquam minoribus intermixtis; ostioliis vix exsertis, sub lente etiam ægre conspicuis; ascis cylindræis, superne incrassatis, rotundatis, poro jodi ope intense cærulescente, $5-6 \times 3$, inferne in pedicellum fragilem usque ad 90 μ . longum leniter attenuatis, parte sp. 120-140 (plerumque 125) \times 10-14; sporidiis octonis, superne oblique, inferne subrecte monostichis, e dorso visis oblongis v. elongato-ellipsoideis, e latere curvulis, utrinque rotundatis, $21-24 \times 7-8$, juvenilibus guttulatis, translucido-flavis, maturis continuis v. rarius plasmate irregulariter partito, fuscis, lineola (?germinationis) spirali, tenui, sub vitro flava, quæ antice in dorso oritur, sporidium semel sinistrorsum ambit, ideoque postice in dorsum iterum pervenit ornatis; paraphysibus longis, tenuibus, evanidis.

Hab. ad ramos siccos arborum in insulis St. Croix et St. Jan Indiæ occidentalis (F. BOERGESEN).

XYLARIA Hill — Syll. I p. 309, IX p. 523, XI p. 283, XIV p. 504, XVI p. 442, XVII p. 622.

I. *Xyloglossa*.

1. *Xylaria polymorpha* (Pers.) Grev. — Syll. I, p. 309. — var. com- 4477
binans Peck, New York State Mus. Bull. n. 116 (1907) p. 33. — Stromatibus subglobosis, sæpe compressis et irregularibus, in apice ramorum e terra surgentibus cæspitosis; peritheciis et sporidiis ut in typo.

Hab. in radicibus v. caulibus emortuis, Bridgeport Ct., Amer. bor. (P. W. GRAFF). — Ob stromata globosa et cæspitosa a varietatibus *Xylariæ Hypoxyli* et *X. spathulatæ* differt.

2. *Xylaria subinvoluta* v. Höhnelt, Ergebn. Bot. Exp. Südbres. 1901, 4478
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) extr. p. 27. — Stromatibus solitariis, raro 2 basi adnatis, cylindræo-clavatis, siccis plerumque subcompressis, 15-40 mm. alt., 5-13 lat., 5-7 mm. cr., supra rotundatis, ubique peritheciis tectis, plerumque sessilibus v. pedicello brevi crassiusculo usque ad 10 mm. longo donatis, nigris, opacis, basi plus v. minus umbrinis v. castaneo-brunneis, ob ostiola perithecorum subprominentibus rugulosis; crusta stromatica longitudinaliter plicato-fissa et marginibus involutis; peritheciis globoso-ovoideis, 500-600 μ . diam.; ascis numerosissimis,

cylindræis, 100-110 \times 5-6, plerumque octosporis raro tetra- v. hexasporis; paraphysibus numerosissimis, tenuibus, muco vestitis; sporidiis plerumque laxè rectè monostichis, nigricantibus, ellipsoideis, utrinque fusoideo-acutatis, plerumque 8 \times 3.

Hab. in ligno putri in silvis primævis, prope Raiz da Serra Sao Paulo Brasilæ. *Xylaria involutæ* Sacc. et *claviformi* Starb. affinis.

3. *Xylaria radicata* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 127. 4479

Stromatibus simplicibus v. basi fasciculatis longè radicatis, cylindræo-clavatis vel fusoideis, primo cinereo-pruinosis, dein atris, usque ad 8 cm. longis, 5 mm. cr., parte radiciformi usque ad 65 cm. long., 1 cm. crassis, teretibus; peritheciis immersis, vix ostiolatis (plerumque immaturis); ascis longè cylindræis, octosporis, oblique monostichis, navicularibus, c. 15 \times 4 immaturis.

Hab. in radicibus putrescentibus Coccoes, Lome Togo Africæ centr. (WARNECKE).

4. *Xylaria strobiliformis* P. Henn., in Voeltzkow Reise Ostafrika III 4480

(1908) p. 31, tab. III, fig. 25. — Stromatibus ovoideis, stipitatis, strobiliformibus, atro-carbonaceis, intus gilvis, extus rugulosis, punctoideo-ostiolatis, c. 2 cm. long., 1,5 cm. latis, stipite subsquamoso, ferrugineo, 6-9 mm. longo, c. 3 mm. cr.; peritheciis immersis subglobosis, atris, c. 0,5 mm. diam.; ascis cylindræis, octosporis, p. spor. circ. 120-130 \times 7-10; sporidiis oblique monostichis, oblongè navicularibus, utrinque obtusiusculis, atris, 16-26 \times 6-9.

Hab. in ligno Fianarantsoa Madagaskar. — *Xyl. polymorphæ* (Pers.) var. *hypoxylæ* Nits. affinis.

5. *Xylaria pallide-ostiolata* P. Henn., Engl. Jahrb. XXXVIII (1905) 4481

p. 128. — Stromatibus clavatis stipitatis 1-3 cm. long., atro-rufis, clavula subtereti apice obtusa, 4-5 mm. crassa, verrucoso-rugulosa, ostioliis prominulis, zona pallida depressa circumdatis; stipite usque ad 1 cm. longo, 2 mm. crasso, subtereti, ruguloso, atrofusco, levi; peritheciis immersis, ovoideis, 0,6-0,9 mm. diam.; ascis clavatis apice obtusis, basi stipitatis, 150-170 μ . long., p. spor. 110-130 \times 5-8, octosporis, paraphysibus mycelioides hyalinis c. 2 μ . crassis; sporidiis oblique monostichis, fusoideo-navicularibus, utrinque obtusis v. subacutiusculis, 15-20 \times 5-7, atris.

Hab. in ligno putri, Victoria Kamerun Africæ (WINKLER).

6. *Xylaria arenicola* Welw. et Curr. — Syll. I, p. 311. — var. *bra-* 4482

siliensis Theiss., Ann. Mycol. VI (1908) p. 344. — Stipite radicato, rnizoide, sordide cinereo, sursum fuligineo, subæquali sul-

cato, longitudine varia, simplici vel pluribus fasciculatis; clava paullo incrassata, lanceolata, atra, sulcata, utrinque subattenuata, simplici vel furcata, apice fertili vel acuminato, griseo-pulveraceo, sterili, sæpius applanato-furcato, superficie ob perithecia obtuse v. subconice prominula torulosa, 5-35 \times 1-3 mm.; peritheciis confertis v. interrupte sparsis, areola plus minus distincta glabra et papilla acutiuscula instructis, vix 300 μ . diam.; ascis 65-85 \times 5-7, p. spor. 45-70 μ . longa; sporidiis ellipticis rotundatis, fusco-badiis, 6-10 \times 4-5; paraphysibus filiformibus.

Hab. ad nidos Termitum locisque arenosis, Sao Leopoldo Brasilia (J. Rick S. J.). — *Xylariæ nigripedi*, *X. scoticæ*, *X. rhizomorphæ* etc. affinis, sed satis distincta.

7. *Xylaria brevipes* Sacc. et Fairm. in Saccardo, Microm. Amer. 4438
novi, Journ. of Myc. XII (1906) p. 47. — Stromatibus solitariis v. rarius binatis, lignicolis, cylindraceis, basi rotundatis paullo crassioribus, sursum sensim tenuatis, brevissime stipitatis, ob ostiola acutiuscula vix prominula asperulis, glabris, opace nigris, intus candidis, totis 2,5 cm. longis, 3 mm. diam.; stipite crassiusculo, cylindraceo, longitrorsum sulcato, glabro, nigro, 1-3 mm. long., 1-1,5 mm. cr.; peritheciis immersis, globosis, monostichis, 250-300 μ . diam., nigris; ascis cylindraceis longe sensimque tenuato-stipitatis, parte sporif. 70 \times 5,5-6; sporidiis recte v. oblique monostichis, ellipsoideis, inæquilateris, utrinque obtusatis, 11-12 \times 4-4,5, fuligineis.

Hab. ad truncos dejectos pr. Lyndonville, New York, 1905. — Pertinet ad subgen. *Xyloglossa* Sect. b. Habitu aliquid accedit ad *X. corniformem* et *X. cupressiformem* sed characteribus variis recedit. — Var. *africana* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) p. 75, tab. II, fig. 4. — A typo americano differt ostioliis paullulo minus prominulis, substantia interiore lignicolore nec alba. Totus fungus nigricans, 4,5-5 cm. altus, 3,5-4 cm. cr., stipes 7-8 mm. longus, 1,7-2 mm. cr., sulcatus, glaber; sporidia 9-10 \times 5; asci breve stipitati, 60 \times 5,5-6, parte sporifera. — Ad caudices, Kisanu, Congo Africæ (J. Gillet).

8. *Xylaria fibula* Massee, Kew Bull. n. 7 (1906) p. 256. — Stroma- 4484
tibus sessilibus, pulvinatis, subtus umbilicatis, extus fusco-atris, opacis, minutissime granulatis, intus albo-farctis, suberosis, 1-1,5 cm. latis; peritheciis majusculis, globosis, vix papillato-ostiolatis; ascis cylindraceis apice obtuse rotundatis, basi elongato-pedicellatis, paraphysibus filiformibus obvallatis, octosporis; sporidiis oblique

monostichis, ellipsoideis, inæquilateralibus, 26-30 \times 8-10, primo 2-guttulatis dein opace fuligineis.

Hab. in ligno emortuo Bukit Timak Singapore Asiæ orient. (RIDLEY). — *X. tuberiformi* proxima.

9. *Xylaria gigantea* (Zipp. et Lév.) Fr. — Syll. I, p. 324.

4485

Hab. quoque in insula Java (HEINRICHER). — Clava 10-12 cm. longa, 2-3 cm. crassa, luride fulva vel tabacina, intus pallida, cava; stipite 2-5 cm. longo, 7-10 mm. crasso vel subnullo; peritheciis globosis, nigris, ore vix prominulo; ascis cylindræis, parte sporifera 150 \times 9 stipite longissimo, filiformi, usque ad 75 μ . vel ultra; sporidiis reniformibus, fuscis, 20-23 \times 7. Species hæc meo sensu, tantum forma majuscula *Xylariæ tabacinae* Kickx (1841) est. Etiam *Xylaria Wrightii* Berk., *X. involuta* Kl., *X. portoricensis* Kl. et *X. Gomphus* Fr. saltem prouti ab autoribus intelliguntur huc sunt referendæ. (Bresadola, Ann. Mycol. V (1907) p. 240).

10. *Xylaria involuta* Kl. — Syll. IX, p. 538 — var. *nigrescens* Sacc., 4486

Myc. cong. novi in Ann. Myc. IV (1906) p. 75, tab. II, fig. 6. — A typo dignoscitur clavulis paullo brevioribus et angustioribus, nempe 5 cm. longis, 1-1,2 cm. cr., sæpius magis incurvatis, extus totis æqualiter nigricantibus (nec ochraceo-tabacinis et ob ostiola nigra punctulatis), intus ut in typo, lignicoloribus et compactis; peritheciis globosis immersis, nigris, 1 mm. diam., æque ac in typo.

Hab. ad truncos, Kisantu Congo Africae (J. GILLET). — Stromata, ut in typo, mox longitudinaliter profunde sulcata et subinde fissa. Asci cylindrici, breve stipitati, 90-110 \times 7-7,5; sporidia navicularia, inæquilatera, atro-fuliginea, 14-18 \times 5,5. *Xylariæ involutæ* synonyma sunt: *X. tabacina* (Kx.) Berk. et *X. Telfairii* (Berk.) Sacc. — Syll. I, p. 320 et 324.

11. *Xylaria obesa* Syd., Ann. Mycol. V (1907) p. 400 cum icon. — 4487

Stromate maximo, difformi, e pluribus partibus quasi confluis compressis constante, toto (uno tantum viso) 15 cm. alto, 10 cm. lato, basi stipitiformi crasso sterili prædito, intus lignoso-carnoso pallido; cortice primitus concolori, tandem in parte perithecigera intus atro carbonaceo, extus autem albido ibique plicato-areolato; peritheciis æque distributis, punctiformibus, atris, immersis, apice parum prominulis, carbonaceis; ascis clavatis, apice rotundatis, breviter stipitatis, octosporis, 70-80 \times 8-12; sporidiis oblique monostichis, anguste ellipsoideis, subinde leniter inæquilateris, continuis, ex hyalino atro-fuscis, 12-16 \times 4-6 $\frac{1}{2}$.

Hab. ad lignum, Kibateni in Africa orient. germanica, (A.

KARASEK).

12. *Xylaria papillata* Syd., in De Wildem., Flore Bas-et Moy. Congo 4488 t. III, fasc. I (1909) Extr. p. 18. — Særomatibus plerumque gregaris, minutis, immaturis conicis, maturis plus minusve globosis 2-4 mm. latis, superficialibus, basi stipitiformi latente instructis, apice præsertim in junioribus minute papillatis, primitus albidis, tandem atris, carbonaceis fragilibus; peritheciis vix prominulis, minutissimis; ascis jam elapsis; sporidiis ellipsoideis subinde naviculiformibus, continuis, fuscis, 15-20 \approx 8-10.

Hab. ad cortices, Kisantu, Congo Africa (VANDERYST).

13. *Xylaria Rickii* Theiss., Ann. Mycol. VI (1908) pag. 342, cum 4489 icon. — Stipite glaberrimo, sulcato, brunneo-fuligineo, tereti vel compresso, 8-30 \approx 1-5 mm., intus lignicolore; clava generatim laminato-compressa, rarius cylindrica vel fusiformi, 30-40 \approx 2-4 mm., aterrima, laccata, nitentissima, juventute æneo-cærulescente, ostioli obtusis semiglobosis opacis punctata, longitrorsum sulcato-impressa, sursum polymorpha ac varie dilatato-divisa vel plicata, intus lignicolore, strato tamen peripherico albo; peritheciis minutis, globosis, 200-300 μ . diam. immersis; ascis p. spor. 120-140 \approx 7-9, breviter pedicellatis; sporidiis rectis vel plano-convexis vel curvulis, rotundatis, pluriguttulatis, opacis, 20-28 \approx 6-7; paraphysibus stipatis filiformibus 2 μ . crassis.

Hab. ad truncos in silva, Sao Leopoldo Brasilia (J. Rick S. J.).

— Affinis *X. zeylanica*.

14. *Xylaria riograndensis* Theiss., Ann. Mycol. VI (1908) pag. 343, 4490 cum icon. — Minuta, 5-15 mm. longa, 1-2 mm. lata; stipite brevi, rubigineo-pruinoso, basi subdilatata ochraceo-annulata; clavula delicata, testaceo-miniata vel aurantiaca, intus alba, superficie æquali vel peritheciis mammillose prominulis undulata, supra sensim attenuata sterili acuta, juventute apiculo conidiophoro albo-floccoso coronata; peritheciis minutis 200-300 μ . diam., mammillato-prominulis, disco dilutiore melleo cinetis, ostiolo aterrimo hemisphærico vel subconico exserto; ascis p. sp. 70-95 \approx 6-7, jodo cærulescentibus, pedicello 30-55 μ . longo; sporidiis fusco-badiis; utrinque rotundatis vel vix angustatis, nitide 1-2-guttatis, 11-15 \approx 4-5.

Hab. ad ligna, Petropolis, Rio Grande do Sul, Brasilia (J. Rick S. J.). — Differt a *Xyl. venosula* Speg. clava non reticulato-rimosa, peritheciis non omnino immersis et sporidiis.

15. *Xylaria transiens* Theiss., Ann. Mycol. VI (1908) p. 341, cum 4491

icon. — Stromate conidiophoro brevi, flabelliformi, plicato-crispato vel plus minus clavato-arbusculiformi, albo-roseo, dein griseo, a clavula juvenili sensim elevato, postea deciduo; conidiis ovoideis, $6-10 \approx 2-4$; stromate pyrenophoro: stipite columnæformi indumento crasso æneo-violaceo-pannoso vestito, 2-3 cm. longo, 7-10 mm. cr. in clavam transeunte, clava primitus gilvo-isabellina, dein rubro-aurantiaca vel brunneo-nigrescente, late compresso-ovata vel spathulata, apice rotundato, $12-20 \approx 8-16 \approx 2-4$ mm., intus farcta alba, superficie reticulato-fissa prorumpentibus ostiolis æneo-nigris obtusissimis; peritheciis globosis stipatis 500-700 μ . diam.; ascis p. sp. $90-115 \approx 9-11$, pedicello 40-70 μ . longo; sporidiis $19-24 \approx 9-10$, oblongo-ellipticis, rotundatis, brunneo-nigris, grosse 1-2-guttulatis.

Hab. ad lignum emortuum in silva, Petropolis, Rio Grande do Sul Brasilia (J. ROCK S. J.).

16. *Xylaria torquescens* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4492 p. 74, tab. II, fig. 5. — Parce fasciculata, tereti-clavata, subsessilis, sed deorsum sensim tenuata, tota glabra, 9-10 cm. alta, 1-1,5 cm. cr., sordide cinerea, initio (ut videtur) molliuscula, mox are-scendo fortiter flexuoseque contorta et irregulariter plicata, intus excavata, crusta demum valde fragili et secedente, ob ostiola punctiformia crebra seriatim disposita minute lineato-reticulata, interne albicante; peritheciis globosis, immersis, diu molliusculis et pallidis dein nigricantibus, vix 0,5 mm. diam.; ascis jam resorptis; sporidiis ellipsoideo-navicularibus, utrinque rotundatis, inæquilateris, $11-11,5 \approx 5,5$, fuliginis.

Hab. ad caudices, Kisanu, Congo, Africa (J. GILLET). — *Xyl. grammicæ* affinis, sed magis fragilis, pallidior, peritheciis mollioribus et imprimis sporidiis minoribus (nec 15-18 μ . longis).

17. *Xylaria sessilis* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) 4498 pag. 18, tab. II, fig. 7. — Clavulis ellipsoideo-cylindræis, basi subito constrictis, sessilibus, textura carbonacea intusque denique cavis, 3-4 mm. long., 2 mm. cr., rugosis, fuscis; peritheciis globosis circ. $\frac{1}{2}$ mm. diam., ostiolis papilliformibus, minutissimis, sub lente etiam ægre conspicuis, prominentibus; ascis cylindræis, juvenilibus apice usque ad 7 μ . incrassatis, truncatis, poro jodi ope cærulescente, in stipitem longissimum leniter attenuatis, paraphysatis, maturis evanescentibus, parte sp. $80-100 \approx 6-7$; sporidiis monostichis, e dorso ellipsoideis v. oblongo-ellipsoideis, non-

numquam ovatis, e latere inæquilaterali-subnavicularibus, sæpeque curvulis, 11-15 μ . c. long. \approx 5-6 μ . cr., 2-guttulatis, fuscis.

Hab. ad ramulum corticatum in insula St. Thomas Indiæ occ. (RAUNKIAER).

18. *Xylaria reducta* Syd., Ann. Myc. V (1907) p. 339. — Stromatibus solitariis v. subinde paucis aggregatis, erectis, rectis v. sæpius leniter curvulis, teretibus, apice obtusis, deorsum vix v. parum attenuatis, stipite nullo v. subnullo, totis 1-2 cm. altis, $\frac{1}{2}$ - $\frac{4}{5}$ cm. latis, obscure atro-brunneis, peritheciis immersis, minutissimis punctiformibus, atris; ascis cylindraceis v. subfiliformibus, apice obtusis, pedicellatis, 65-75 \approx 5-6, octosporis; sporidiis monostichis, ellipsoideis, utrinque acutiusculis, continuis, fuscis, opacis, 6-8 \approx 3-4.

Hab. ad lignum, Kiemoni in Africa orient. germanica (A. KÄRSEK).

19. *Xylaria rugosa* Sacc., Myc. cong. novi, Ann. Mycol. IV (1906) pag. 74, tab. II, fig. 2. — Fasciculata, suberoso-lignosa, breviter stipitata, casse clavata, tota 3-4 cm. alta, 1-1,5 cm. crassa, fuliginea (nec nigra) in sicco eximie plicato-rugosa sed, ob ostiola latentia superficie levigata, intus lignicolore compactiuscula; peritheciis globosis, 0,5-0,7 mm. diam., immersis; ascis cylindraceis, p. sporif. 110-120 \approx 9-10; sporidiis navicularibus, inæquilateris, utrinque obtusulis, e latere compressis, 22-25 \approx 8-9, atro-fuligineis.

Hab. ad truncos, Kimnenga Congo, Africa (J. GILLET). — Affinis *X. holobaphæ*, sed stromata valde rugosa, sæpius fasciculata, breviora, obtusa; forte affinis *Xyl. curtæ* sed sporidiis longioribus recedit.

20. *Xylaria ophiopoda* Sacc., Myc. cong. novi, in Ann. Myc. IV (1906) p. 74, tab. II, fig. 1. — Solitaria, longissime stipitata, tota glabra, 18-20 cm. alta, suberoso-lignosa; clava tereti-oblonga, inæquali, apice obtusa, nigra, 12-14 mm. cr., superficie valde rugosa sed ostioliis vix punctulata, intus compacta lignicolore; stipite cylindraceo, valde tortuoso, rugoso-sulcato, fusco-nigricanti, 14-15 cm. longo, 4 mm. cr.; peritheciis globosis, immersis, 0,7 mm. diam., totam clavam occupantibus et nonnullis in partem sup. stipitis descendentibus; ascis cylindricis, p. sporif. 160-170 \approx 11-12; sporidiis navicularibus, inæquilateris, utrinque obtusulis, 25 \approx 9-10, atro-fuligineis.

Hab. ad caudices, Kisantu, Africa (J. GILLET). — Præcipue stipite prælongo a formis *X. polymorphæ* dignoscitur.

21. *Xylaria lignosa* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908)

p. 18, tab. II, fig. 6. — Stromate grosse clavato, compresso, subcurvato, leviter torto, solido, lignoso, apice obtuso, postice in stipitem crassum, brevissimum, glabrum, clavæ concolorem sensim attenuato, extus ruguloso, fusco, ex ostiolis peritheciolorum nigropapillato, intus ex argillaceo fumoso, long. usque ad 11 cm., cr. $4 \approx 2$ cm.; peritheciis dense stipatis, late ellipsoideis, $\frac{3}{4}$ -1 mm. $\approx \frac{1}{2}$ - $\frac{3}{4}$ mm.; ostiolis papilliformibus, nigris, subnitentibus, poro minuto pertusis; ascis plurimis jam resorptis, paucis evanescentibus visis, poro jodi ope cærulescente; sporidiis e dorso elongato-ellipsoideis, e latere navicularibus, utrinque rotundatis, guttulatis, 14-18 \approx 6-7,5, maturis atris.

Hab. ad truncos in insula St. Croix Indiæ occid. (RAUNKIAER).

22. *Xylaria elegans* Syd., Ann. Mycol. V (1907) p. 357, cum icon. — 4498

Stromatibus solitariis, totis 1,5-3 cm. longis, clavula oblongo-conica, 1-1,5 cm. longa, 3-5 mm. crassa, apice acuta, basi haud in stipitem attenuata, crusta dealbata omnino tecta, intus pallida lignosa; stipite cylindrico, $\frac{3}{4}$ -1 $\frac{1}{2}$ cm. longo, 1-1 $\frac{1}{2}$ mm. crasso, atro, glabro, longitudinaliter sulcato; peritheciis immersis, atris, punctiformibus, minutis; ascis cylindræis, breviter stipitatis, 110-150 \approx 12-16, octosporis; sporidiis monostichis, cymbiformibus, continuis, fuscis, plerumque 2-guttulatis, 30-42 \approx 10-14.

Hab. ad truncum putridum, Prov. Sao Paulo, Sao Francisco dos Campos, Brasilia.

23. *Xylaria appendiculata* Ferd. et Winge, Botanisk Tidsskr. XXIX 4499

(1908) p. 17, tab. II, fig. 5. — Stromatibus nunc hypoxylloideis, subglobosis, nunc clavatis, stipitatis; clavulis rugosis, ostiolis peritheciolorum exasperatis, long. usque ad 3 mm., 1 mm. fere cr., fusco-nigris, intus niveis, deorsum in stipitem primo albo-farinosum, mox nudum, longitudinaliter striatum, clavulæ fere colore et longitudine leniter attenuatis; peritheciis remotis, globosis, 200 μ . circ. diam., ostiolis semiglobosis v. subconicis, magnis, prominentibus; ascis cylindræis, apice rotundatis, poro jodi ope intense cærulescente, in stipitem leniter attenuatis, 105-115 (parte sp. 80-87) \approx 7,5-8 $\frac{3}{4}$; sporidiis monostichis, octonis rarissime quaternis, 14 μ . long., coffeiformibus, 11-12,5 \approx 6,5-7, 2-guttulatis, fuscis, mucotenui indutis, utrinque appendicula obtuse conica, hyalina, 2-3 μ . long. instructis; paraphysibus filiformibus, septatis.

Hab. ad folia sicca Crescentiæ cucurbitinæ (?), in insula St. Croix Indiæ occ. (RAUNKIAER).

24. *Xylaria albo-punctulata* Rehm, in Kellerman Journ. of Mycol. 4500

XIV (1908) p. 5. — Stromatibus erectis, oblongo-claviformibus, utrinque plus minusve compressis, apice rotundatis, in stipitem c. 0,5 cm. long. et 0,8 cm. lat. abeuntibus, glabris, carbonaceis, 5-6 cm. long., 1,5 cm. latis, extus fuscis, longitudinaliter substriolatis, versus stipitem nigrescentibus, intus solidis, nigris, peritheciis plane immersis, globosis, 1 mm. diam., ostiolis minimis, nigris, extus strias perspicue punctulatas in areolis orbicularibus albidis, 0,3-1 mm. latis formantibus; ascis cylindraceis longissimis, 7 μ . lat., 8-sporis; sporidiis fusiformibus, plerumque navicularibus, fuscis, 1-cellularibus, 15 \times 6, monostichis; paraphysibus filiformibus.

Hab. ad truncos, Los Amates Dep. Izabal Guatemalæ (KELLERMAN). — *Xylaria grammicæ* Mart. proxima, differt striis stromaticis distinctis confluentibusque, peritheciis minoribus atque defectu areolarum albidarum.

25. *Xylaria Laurentii* P. Henn., Etat indép. du Congo, Mission E. 4501 Laurent. fasc. IV (1907) p. 362. — Stipite elongato-radicato, rugoso, stromatibus cæspitosis, rugoso-flexuosis, tuberculatis, atrofusis, p. p. subnitentibus; peritheciis immersis minute ostiolatis, subglobosis intus albidis; ascis filiformibus, paraphysatis, octosporis, c. 4 μ . cr.; sporidiis longe fusoideis, utrinque acutis, atrobrunneis, 17-22 \times 3-4.

Hab. ad truncos emortuos, Dibele Congo Africæ centr.

II. *Xylocoryne*.

26. *Xylaria Hercules* Speg., An. Mus. Nac. Buenos Aires t. XIX 4502 (1909) p. 347. — Solitaria v. laxe cæspitosa; clavis cylindraceis v. linguæformibus, intus farctis albo-suberosis, 5-10 cm. long., 3-5 cm. lat., 1-1,5 cm. cr., stipite abbreviato v. elongato subvelutino suffultis; peritheciis dense constipatis, e globoso subpiriformibus non prominulis 0,75-1 mm. alt., 0,6-0,7 mm. diam., coriaceis, atris; ascis cylindraceis longe pedicellatis, parte sp. 75-100 \times 7-12, pedicello subæquilongo suffultis, non v. parce paraphysatis, octosporis; sporidiis rectis v. oblique monostichis, navicularibus, 16-20 \times 6-9, opace fuligineis.

Hab. frequens ad caudices putridos cariosos in silvis circa Formosa nec non in Bobadal, Rep. Argentina Amer. austr.

27. *Xylaria sordida* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4503 (1909) pag. 348. — Cæspitosa; clavulis elliptico-lanceolatis valde

compressis 1-2 cm. long., 5-10 mm. lat., 2-3 mm. cr., utrinque attenuatis, deorsum in pedicellum breviorum pannosulum sensim attenuatis, extus sordide fuscis dense minuteque colliculoso-scrupulosis intus albo-ligineis; peritheciis dense constipatis subglobosis 0,5-0,6 mm. diam. plus minusve prominulis, fuscis, coriaceis, vix ostiolato-papillatis; ascis cylindraceis prælonge pedicellatis aparaphysatis, $120 \approx 6$; sporidiis ellipsoideo-navicularibus subopace fuligineis, $9-10 \approx 4-6$, non v. 1-2-guttulatis.

Hab. ad schidia lignea putrescentia prope Córdoba et Tucumán nec non in silva Bobadal, Rep. Argentina Amer. austr.

28. *Xylaria corniformis* Fr. — Syll. I, p. 327 — var. *macrospora* 4504
Bres. in Theiss., Ann. Myc. VI (1908) p. 342. — Versiformis; typice compresso-spathulata, imo flabellata, rarius plus minus regulariter clavata, formis compressis ludens; stipite curto firmo, indumento subiculiformi purpureo-violaceo crasso, sæpius pluribus stipitibus uno subiculo crassissimo junctis; clava primo fusco-argillacea dein brunnea, scruposula, superficie areolata, apice undulato vel simplici obtusulo vel conico haud acuto; peritheciis ovato-angulatis, immersis, minutis, stipatis, 200-400 μ . diam., ostiolo delicato semigloboso prominulo; ascis p. sp. 80-100 $\approx 6-8$, pedicello 30-80 μ . longo; sporidiis rectis v. reniformibus, opacis, utrinque rotundatis, grosse 2-guttulatis, sæpius in asco agglomeratis 15-19 $\approx 5 \frac{1}{2}$ -6 $\frac{1}{2}$.

Hab. ad truncos in silva, Sao Leopoldo Brasiliæ. — Stipes 2-20 $\approx 2-7$ mm. varians; clava 15-30 mm. alta, 3-25 mm. lata, 2-4 mm. cr.

29. *Xylaria macropoda* Speg., An. Mus. Nac. Buenos Aires t. XIX 4505
(1909) p. 347. — Cæspitosa, erecta 20-25 cm. alta, sordide atrofusca e carbonaceo suberosa; clavulis subcylindraceis 5-10 cm. long., 1-1,5 cm. diam. colliculosis levibus, fusco-farctis, ubique fertilibus, stipite prælongo suffultis 10-15 cm. long., 5-7 mm. cr.; peritheciis subglobosis immersis, subcarbonaceis 0,8-1 mm. diam. non v. vix papillulato-ostiolatis; ascis cylindraceis longe pedicellatis subaparaphysatis, parte sporif. 60-75 ≈ 6 , ped. 40-75 μ . longo; sporidiis anguste navicularibus fuligineis recte monostichis, 10-14 ≈ 5 .

Hab. ad palos humifusos subputrescentes in aridis prope Tucumán Rep. Argentina, Amer. austr. — *Xyl. longipedi* Nits. affinis sed certe distincta.

III. *Xylostyla*.

30. *Xylaria fasciculata* Speg. — Syll. I, p. 340. — f. *leptasca* Speg., 4506
An. Mus. Naç. Buenos Aires t. XIX (1909) pag. 346. — A typo
recedit ascis aparaphysatis nec non gracilioribus.

Hab. ad truncos cariosos Citri Aurantii prope Bella Vista,
Argentina Amer. austr. (J. M. HUERGO).

31. *Xylaria lima* v. Höhnelt, Ergeb. Bot. Exp. Südbras. 1901, Denk. 4507
k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 27, tab. I,
fig. 6. — Stromatibus simplicibus, opace nigris, glabris; stipite
cylindraceo circ. 5 mm. long., 0,5 mm. cr., basi vix incrassato et
clavam 7 mm. longam, 1 mm. latam, cylindraceam utrinque atte-
nuatam summo apice sterilem sed lateraliter ubique ob ostiola sur-
sum versa fortiter prominentia dentatam v. serrulatam ferente;
contextu stromatico albo suberoso; peritheciis crebris circ. 260 μ .
diam., conoideo prominentibus, ostiolo rotundato circ. 30 μ . lato;
paraphysibus mucosis; ascis cylindraceis, octosporis, circ. 90 \approx 7-8;
sporidiis monostichis, subpellucidis violaceo-nigris, ellipsoideo-sub-
reniformibus, unilocularibus, utrinque angustatis, 12-13 \times 6.

Hab. ad terram humosam, Raiz da Serra prope Santos, São
Paulo, Brasilia.

32. *Xylaria Phyllocharis* Mont. — Syll. I, pag. 342 — var. *hirtella* 4508
Theiss., Ann. Mycol. VI (1908) pag. 343. — Stipite 1-2 $\frac{1}{2}$ cm.
longo, badio-nigro, subtorto, striato, delicato, fusco-hirtello, ætate
solum glabrato; clava 6-8 mm. longa, 600-800 μ . crassa, atra, to-
rulosa, breviter apiculata; peritheciis semiliberis, globosis vel sub-
conicis, ostiolo exserto hemisphaerico v. conico; ascis p. sp. 65-
90 \approx 7-9, pedicello firmo 20-55 μ . longo; sporidiis obscure brun-
neis, grosse guttatis, obtusis, gibbosis, delicate hyalino-tunicatis,
haud appendiculatis.

Hab. in foliis siccis Rubiaceæ cujusdam, in silva, São Leo-
poldo Brasiliæ. — Differt a typo præcipue stipite hirtello, spori-
diis largioribus peritheciisque semiliberis et clava non griseo-æneo-
leprosa. A *Xyl. phyllophila* Ces. et *Xyl. delicatula* Starb. quibus
affinis, satis diversa.

33. *Xylaria venustula* Sacc. Myc. cong. novi, Ann. Myc. IV (1906) 4509
p. 76, tab. II, fig. 10. — Cæspitosa, stipitata, exilis, tota nigra
et glabra, 3-3,5 cm. alta; stipite simplici v. rarius furcato, angu-
ste cylindrico, sicco compresso et torto, 1,5 cm. longo, vix 1 mm.

cr.; clavula cylindrica, leviter torulosa, 1,5 cm. longa, 1,5-1,7 mm. cr., extus ostiolis minutissimis punctulato-asperula, apice mucrone tereti-conico, 3-5 mm. longo, vix 1 mm. cr., sterili terminata; medulla stromatis interiore angustissima albida; peritheciis globosis, vix 0,5 mm. diam.; ascis cylindraceis, p. sporif. 90-100 \times 7-8; sporidiis oblongo-ovoideis, leviter inæquilateris, utrinque rotundatis, atro-fuligineis, 12-14 \times 5-5,3.

Hab. ad truncos, Kisantu, Africa (J. GILLET). — Affinis *Xyl. cæspitulosæ* sed stipes simplex v. rarius tantum e basi furcatus et sporidia latiora; *Xylariæ apiculatæ* sed sporidia multo breviora; *Xylariæ gracili* et *scopiformi* sed clavula manifestissime mucronata.

34. *Xylaria variegata* Syd., Ann. Mycol. V (1907) p. 358. — Stro- 4510
matibus solitariis, erectis, filiformibus, in ligno denigrato insertis simplicibus, raro etiam bifurcatis, totis 3-6 cm. longis, usque ad 2 mm. latis, sordide ochraceis, apice brevi acuto sterili, basi sterili, non incrassato, glabro; peritheciis sphaerico-mammiformibus, papillulatis, atris, sparsis vel aggregatis, 300-500 μ . diam.; ascis filiformi-cylindraceis, p. sp. 35-55 \times 3-4, longe stipitatis, octosporis; sporidiis oblique monostichis, ellipsoideis, sæpe leniter inæquilateris, continuis, fuscis, primo 2-guttulatis, 7-9 \times 2 $\frac{1}{2}$ -3.

Hab. in ligno, Campinas, Sao Paulo, Brasilia.

35. *Xylaria gracilentia* Syd., Ann. Mycol. VIII (1910) p. 38. — Stro- 4511
matibus ut videtur solitariis, erectis, atris, simplicibus, raro bifidis, 2-5 cm. altis, subfiliformibus, apice sterili elongato subulato 0,5-1,5 cm. longo; stipite subtereti vel compresso, glabro, filiformi, c. 1-3 cm. longo, $\frac{1}{2}$ - $\frac{3}{4}$ mm. crasso; peritheciis in stromatum parte media crassiore, usque 2 mm. crassa et 2 cm. longa, plus minus copiose sitis, subliberis, subglobosis, prominulis, majusculis, c. 1 mm. latis, distincte papillatis; ascis cylindraceis, apice obtusis, longe stipitatis, p. spor. 140-165 \times 14-18, octosporis; stipite usque ad 100 μ . longo; sporidiis monostichis, ellipsoideis, utrinque acutiusculis, continuis, fuscis, 21-32 \times 10-13.

Hab. ad frustula lignea Pauai, Benguet, prov. Luzon, insulæ Philippinenses (E. D. MERRILL).

36. *Xylaria Termitum* Jumelle et Perrier de la Bâthie in Rev. génér. 4512
de Bot. (1910) pag. 55-60, fig. 5-9. — Stromatibus conidiophoris simplicibus v. ramosis, in nidis *Termitum* parte radicali prælonga immersis; clavis cinereis cylindraceis, apice abrupte conicis, 2-6 mm. cr.; conidiophoris 30-60 \times 5-9 apice globoso-inflatis; conidiis immersis, in vesicula capitatis, globulosis, 3 μ . diam.; stromatibus

ascophoris e parte radicali immersa prælonga tortuosa ramosa oriundis, totis glabris, indivisis; stipitibus cylindricis $1\frac{1}{2}$ -2 cm. long., nigris; clava cylindraceo-clavata, albida, punctis nigris (ostiolis) notata; peritheciis immersis ovoideis 600-800 \times 340-500; ascis breviter paraphysatis; sporidiis ovoideis, nigricantibus, 6 \times 3, uno apice obtusioribus.

Hab. in nidis Termitis Perrieri, Madagascar. — Diagn. species testibus auctoribus distinguitur conidiis in vesicula capitatis. Quoad biologiam cfr. Auct. l. c.

IV. *Xylodactyla*.

37. *Xylaria aristata* Mont. — Syll. I, p. 333. — var. *hirsuta* Theiss., 4513
Ann. Mycol. VI (1908) pag. 344. — Stromate filiformi atroglauescente, basi vix incrassato, pilis atro-fuscis hirsuto, 10-22 \times 0,3-0,5 mm., sulcato; capitulo globoso v. breviter elliptico, primo dealbato, dein griseo-atro 1-2 mm. diam., subtus non striato, peritheciis globosis tuberculato, apice mucrone brevi acuto conico coronato v. stromate filiformi tenuissimo longe superato, vel capitulo omnino obtuso; peritheciis pro ratione magnis, 600 μ . diam., protuberantibus, ostiolo nigro papillato in areola generatim cinerescente insignitis; ascis p. sp. 90-120 \times 8-10, pedicello 35-70 μ . longo; sporidiis rectis vel plano-convexis, utrinque angustatis, 14-20 \times 7-9.

Hab. in foliis siccis Rubiaceæ cujusdam in silva, Sao Leopoldo Brasiliæ. — Differt a typo peritheciis subliberis sporidiisque majoribus. Ostioli exsertis a *Xyl. marasmoidea* B. et C. et *X. axifera* Mont.; sporidiis majoribus a *X. ocephala* Pat. et *Xyl. delicatula* Starb. diversa.

38. *Xylaria mauritiensis* P. Henn., in Voeltzkow Reise Ostafrika III 4514
(1908) p. 30, tab. III, fig. 24. — Stromatibus subcæspitosis, filiformibus, erectis, simplicibus v. ramosis, atris, 4-5 cm. long., c. 1 mm. cr., apice subulatis, basi strigosis; peritheciis subliberis spiculiformibus, globosis, atris, minute ostiolatis, 0,5-0,7 mm. diam.; ascis cylindraceis, stipitatis, c. 100 μ . long., p. spor. 50-60 \times 4-5, octosporis, paraphysatis; sporidiis oblique monostichis, inæquilateraliter fusioideis, utrinque subacutiusculis, 8-12 \times 3,5-4,5, atris.

Hab. in ligno, Mauritius Africa. — *X. trichopoda* Penz. et Sacc. affinis sed differt ascis sporidiisque minoribus.

39. *Xylaria smilacicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4515

(1909) p. 348, cum icon. — Solitaria v. laxissime gregaria parva insititia; clavulis inflato-torulosis, atris, sæpe apiculatis, stipite gracili brevi suffultis, carbonaceis, 1,5-3 mm. long., 1-1,5 mm. cr.; peritheciis dense constipatis, sat prominulis, 5-24 in quaque clavula, globulosis 0,4-0,5 μ . diam., carbonaceis, minute papillato-ostiolatis; ascis paraphysatis, longiuscule pedicellatis, cylindraceutis v. subclavulatis, p. sp. 80-120 \times 8-12, ped. 60-80 μ . long., octosporis; sporidiis ellipsoideo-navicularibus, 14-18 \times 6-8, opace fuliginis, non v. grosse 1-2-guttulatis.

Hab. ad sarmenta arida putrescentia in Parque Roca, prope Tucuman, Argentina, Amer. austr.

40. *Xylaria Copelandi* P. Henn., Hedwigia XLVII (1908) p. 260. — 4516
Stromatibus dense cæspitosis, ovoideis, breve stipitatis, rugulosis, pruinosis v. cinereo-pilosulis, atris, apice longe rostratis, c. 1 mm. diam., sæpe longitudinaliter sulcatis, paucilocularibus; ascis cylindraceuto-clavatis, pedicellatis, p. spor. 80-90 μ . l., 8-sporis, paraphysatis; sporidiis oblique monostichis navicularibus, obtusiusculis, atris, 15-16 \times 6-7.

Hab. in truncis Calami sp., Luzon, Prov. Bataan, Lamao River, Ins. Philippin. (COPELAND).

41. *Xylaria bataanensis* P. Henn., Hedwigia XLVII (1908) p. 260. 4517
— Stromatibus cylindraceuto-fusiformibus, stipitatis, cæspitosis vel irregularibus, clavula usque ad 2,5 cm. longa, 1,5-3 mm. crassa, apiculata v. rostrata, striatula, ostiolis prominulis; stipite tereti, æquali, usque ad 1 cm. longo, 0,5-1 mm. lato; ascis pedicellatis, 80-100 \times 5-6,5, 8-sporis, paraphysatis; sporidiis oblique monostichis navicularibus, atris, obtusis, 10-14 \times 4-5,5.

Hab. in ligno putrido, Luzon, Prov. Bataan, Lamao River Ins. Philippin. (MERRILL, COPELAND).

42. *Xylaria Fioriana* Sacc., in Ann. Mycol. VIII (1910) p. 337. — 4518
Laxe gregaria v. sparsa, parvula, solitaria, rarius individuis 2-3 basi connexis, tereti-cuspidata, tota castaneo-nigra, apice acuta sterili, 10-15 mm. alta, 1,5 mm. cr., stipite deorsum leniter sensim incrassato, nigro-hirtello, dein glabrato, 2-6 mm. longo; parte peritheciigera 4-6 mm. longa, initio nigro-hirtella; peritheciis minutis globoso-conicis, 200 μ . diam., prominentibus, basi insculptis; ascis sporidiis (propriis, ut videtur), oblongo-ellipsoideis, fuliginis, 11 \times 4.

Hab. in trunco putri Euphorbiæ abyssinicæ sec. torrentem Messeb, alt. 1300 m. Mensa (ADR. FIORI) et prope Filfit Ery

thraeæ (L. SENNI). — Ab affini *X. riograndensi* Theiss. differt, stipite deorsum evidenter incrassato, atro-brunneo-hirtello, peritheciis prominentibus (numquam immersis), statura majori etc. Conidia non visa. Clavulae indivisæ, rarissime furcatae, sursum sæpius arcuatae.

43. *Xylaria corniculata* Sacc., Myc. cong. novi, Ann. Myc. v. IV 4519 (1906) p. 75, tab. II, fig. 9. — Fasciculata, versiformis, tota nigricans, coriacea, intus compacta albida, 2-4 cm. alta; stipite cylindraceo, e velutino glabrato, 1-2 cm. longo, 2,5-3 mm. cr., in clavulas seu ramos 2-4 modo cylindraceos, modo dilatato-compressos abeunte; clavulis rugosis et asperulis, apicibus acutis corniculatis sterilibus; peritheciis immersis, globosis, nigris, vix 0,5 mm. diam., ostiolis latentibus; ascis cylindraceis p. sporif. 110-130 × 8-9; sporidiis ovoideo-oblongis, utrinque rotundatis, leviter inaequilateris, 18-20 × 9-10, atro-fuligineis.

Hab. ad truncos, Kisantu, Congo Africae (J. GILLET). — Affinis videtur *X. digitata* sed satis dignoscitur clavulis sæpe dilatato-compressis, superne bicorniculatis, stipite velutino etc.

44. *Xylaria capillacea* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4520 p. 76, tab. II, fig. 11. — Dense caespitoso-fasciculata, tota 6 cm. alta; stromatibus conidiophoris usque ad medium indivisis, cylindraceo-filiformibus, nigris, pilis patentibus crebris hirsutis, sursum in ramulos filiformi-capillaceos, tortuosos, glabros, pallidiores, conidiophoros partitis; conidiis oblongo-ellipsoideis, hyalinis, 5-6 × 2,5; stromatibus ascophoris intermixtis (an semper a conidiophoris separatis?), brevioribus; stipite hirsuto 10-15 mm. longo, 0,5-1 mm. cr., clavula simplici, cylindracea, torulosa, 4-5 mm. longa, 1,5 mm. cr., ostiolis minute papillatis asperula, nigricanti, glabra, mucrone brevi acuto terminata; ascis cylindraceis breve stipitatis p. sporif. 60-70 × 4-5; sporidiis ovoideo-oblongis, utrinque obtusulis, leviter inaequilateris, 9,5-11 × 4, atro-fuligineis.

Hab. in fructibus putrescentibus dejectis Cassiae (Cathartocarp) fistulae vel affinis, Kisantu, Congo Afric. (J. GILLET). — Affinis videtur *X. janthino-velutinae*, sed ramulis capillaceis, stromatibus fertilibus a sterilibus, ut videtur, separatis dignoscitur.

45. *Xylaria brachiata* Sacc. Myc. cong. novi, Ann. Myc. v. IV (1906) 4521 p. 75, tab. II, fig. 8. — Longe stipitata, solitaria; stipite anguste cylindrico, 6 cm. alto, 1-1,5 mm. cr., nigricante, hirtello, sæpe e medio arrecto-furcato; ramo altero sterili, altero clavuligero; clavula fusioidea summo apice acuta et sterili, 10-12 mm. longa,

2-3 mm. cr., nigricanti, vix minute rimuloso-rugosula, intus alba et partim cava; ostiolis latentibus; peritheciis crebris, globosis, immersis, nigris, vix 0,5 mm. diam.; ascis cylindraceutis, p. sporif. 85 $100 \approx 8-9$; sporidiis oblongo-ovoideis, leviter inæquilateris, utrinque obtusis, atro-fuligineis, $12-14 \approx 5-5,5$.

Hab. ad truncos, Kisantu, Congo Africae (J. GILLET). — Stipite longo e medio furcato, clava minuta sublevigata satis distinguitur species.

Fam. 5. Valsaceæ

Sect. 1. Allantosporæ.

CALOSPHERIA Tul. — Syll. I p. 95, IX p. 477, XI p. 272; XIV p. 479, XVI p. 419, XVII p. 561.

1. *Calosphæria benedicta* Rehm in Strasser, Verh. k. k. zool.-bot. Gesellsch. Wien LVII (1907) p. 322. — Peritheciis gregariis sub cortice extus pallide griseo-maculato intus immutato nidulantibus, 10-12 valsiformibus, globosis, 300-400 μ . diam., supra collo filiformi usque ad 600 μ . longo, apice obtuso ruguloso usque ad 100 μ . cr. erumpentibus; ascis fusoides, sessilibus, $40 \approx 10$, octosporis; sporidiis cylindraceutis, curvulis, unilocularibus, hyalinis, $12-15 \approx 3$, tristichis; paraphysibus tenuissimis, septatis, usque ad 3 μ . cr.

Hab. in cortice sicco Piri Mali, Sonntagberg Austriae inf. (STRASSER). — A *C. Aceris* sporidiis majoribus differt.

2. *Calosphæria pleurostoma* Chenant. in Bull. Soc. Sc. Nat. Ouest France (1910) p. 16, t. IV, f. 1. — Peritheciis immersis v. sæpius liberis, inordinate aggregatis v. circinantibus, pseudostromate carbonaceo-spongioso connexis, nigris v. brunneis, e levigato verruculosus, ostiolis conicis v. cylindraceutis, horizontaliter protractis et matriæ adherentibus, subinde flexuosis, peritheciæ diametrum æquantibus v. longioribus; ascis clavatis, apice rotundatis, deorsum sensim tenuatis, subsessilibus, paraphysibusasco duplo longioribus, crassis, articulatis, articulis 2-guttatis; sporidiis distichis, allantoides, hyalinis, $6-7 \approx 1,5-1,7$.

Hab. in ramis Piri Mali, Bagatelle pr. Morlaix Galliae. — Ad *Wegelinam* nutat.

EROSTELLA (Sacc.) Trav. Fl. ital. Crypt. Fungi, Pyren. fasc. I (1906) p. 155, *Calosphaeria* subgen. *Erostella* Sacc. — Syll. I, pag. 101 (1882) *Togninia* Berl., Icon fung. III, p. 9 (1900).

1. *Erostella minima* (Tul.) Trav., loc. cit. (1906) p. 156. — Ita vo- 4524
canda *Calosphaeria minima* Tul., *Togninia minima* Berl.
2. *Erostella Rhododendri* (Rehm) Sacc. et Trott., *Togninia Rhodo-* 4525
dendri Rehm, Ann. Mycol. V (1907) p. 536. — Peritheciis 4-6
in acervulos orbiculares collectis, corticæ interiore pustulatim inflato,
haud mutato tectis, denique epidermide ostioli minimis valsifor-
miter perforata conspicuis, monostichis, circumstantibus, globulosis,
ca. 0,3 mm. diam.; ascis clavatis, tenerrimis, usque ad 60 × 5, octo-
sporis; sporidiis oblongis, 1-cellularibus, rectis, hyalinis, 8 × 2, di-
stichis; paraphysibus nullis.

Hab. in ramulis *Rhododendri* hirsuti ad viam inter
Schlehdorf et montem Herzogenstand alpium Bavaricæ (Dr. REHM).

3. *Erostella transversa* Sacc. et Fairm. in Saccardo, Microm. Amer. 4526
novi, Journ. of Myc. v. XII (1906) pag. 48. — Peritheciis inter
librum et periderma evolutis et rima transversali crassiuscule mar-
ginata circ. 2 mm. longa erumpentibus sed non emergentibus, in
quoque acervulo 4-6, globulosis, 500-750 μ . diam., peridermate
secedente subliberis et sæpe collapsis-concavis, glabris, nigris, col-
lis brevissimis, ostioli obtusis; ascis clavatis, subsessilibus sed deor-
sum tenuatis, apice rotundatis, 44-48 × 5,5-6, octosporis; paraphy-
sibus filiformibus,asco multo longioribus, minute guttulosi; spo-
ridiis distichis allantoideis, leviter curvis, 8-9 × 2,5, perfecte hyalinis.

Hab. in cortice *Betulae* sp. in silvis pr. Lyndonville, Sept.
1905. — Ab *Erostella vasculosa* Sacc. et *E. ambigua* (Berl.) Sacc.
differt sporidiis brevioribus, angustioribus, peritheciis rimose trans-
verseque erumpentibus, etc.

QUATERNARIA Tul. — Syll. I p. 106, IX p. 449, XVI p. 422.

1. *Quaternaria chilensis* Speg., Fungi Chilenses (1910) p. 28, cum 4527
icon. — Stomatibus subhemisphaericis innato-erumpentibus extus
carbonaceis intus pulchre viridibus; peritheciis 3-4-circinantibus
mediocribus brevissime ruguloseque ostiolatis, globosis, 200 μ . diam.;
ascis clavulatis octosporis, paraphysatis, parte sporifera 40 × 5;
sporidiis cylindræis, curvulis, 8-12 × 2-2,25, subchlorinis.

Hab. in ramos emortuos *Lithraeae causticae*, Parque de
Lota Chile Amer. austr.

VALSA Fr. — Syll. I p. 108, IX p. 449, XI p. 273, XIV p. 481, XVI p. 422, XVII p. 562.

1. *Valsa rhodospora* Sacc., Not. Myc. VII, Ann. Myc. IV (1906) 4528 p. 275. — Acervulis cortice nidulantibus creberrimis et plerumque confluentibus, irregulariter circinantibus; peritheciis globulosis, nigricantibus, sæpe et varie collabescentibus, 300-400 μ . diam.; collis brevibus; ostiolis vix erumpentibus et discum minutum nigrum sæpe obsoletum formantibus; contextu celluloso, firmulo, fuligineo; ascis fusiformibus, sessilibus, 42-50 \times 9-11, apophysatis, octosporis; sporidiis distichis, allantoideis, utrinque rotundatis, ex hyalino dilutissime roseis, 17-18 \times 3, facile eructatis et in massulas irregulares roseas superficiales coalescentibus.

Hab. in corticibus atratis ramorum majorum *Aceris* sp., Lyndonville New York Amer. bor. (C. E. FAIRMAN). — Species sporidiis exsiliantibus roseis mox dignoscenda. Est affinis *V. ambientis*, a qua præterea recedit acervulis creberrimis, ostiolis minus conspicuis et peritheci contextu firmiore, et ex cellulis, ut videtur, minus sinuosis formato.

2. *Valsa amphibola* Sacc., Ann. Mycol. VI (1908) pag. 560. — 4529 Stromatibus gregariis, pulvinato-verruciformibus, cortice nidulantibus mox erumpentibus et prominentibus, 1-1,4 mm. diam., disco subcirculari, applanato, albido, ostiolis globulosis, nigris, sæpius periphericis punctato; peritheciis globulosis, monostichis, nigris 300 μ . diam.; collis cylindricis longiusculis; ascis late clavatis, subsessilibus, basi acutatis, apice rotundatis, 45-55 \times 8, apophysatis, octosporis; sporidiis distichis v. partim oblique monostichis, allantoideis, 12-14 \times 2,5, hyalinis, curvulis.

Hab. in ramis radicalibus epigæis Piri Mali, Tamsel Germaniæ (P. VOGEL). — Stromatis substantia interior a corticali vix distinguenda et nulla linea nigra stromatica circumscripta; hinc species ob discum ad subgen. *Leucostomam* vergit, ob defectum vero lineæ stromaticæ ad *Euvalsam*. Habitus fere *Eutypellæ* sed ascis sessiles etc.

3. *Valsa Eucalypti* Cooke et Harkn. — Syll. I, p. 127 — var. *Myrti* 4580 Roll. Bull. Soc. Myc. Fr. (1905) p. 22. — Pustulis rotundis v. oblongis, elevatis, epidermide cinctis, parallele gregariis, 1-2 mm. lat., pro more 20 perithecia includentibus; peritheciis minutis, nigris 0,25 mm. latis; stipatis; ostiolis curtis, sæpe coalitis, exertis, atro-nitidis, supra gibbosis; ascis; sporidiis cylindraceis, utrinque rotundatis, rectis curvulisve, 6-8- rarius 10 \times 1,5.

Hab. in ligno Myrti communis, Sa Coma in insulis Balearibus.

4. *Valsa Yerbæ* Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) 4531 p. 118. — Acervulis cortice innatis sparsis v. laxe gregariis; stromate nigro lenticulari, 0,75-1,50 mm. diam.; peritheciis 3-7, globosis, 350-400 μ . diam., membranaceis, olivaceis, ostioliis conniventibus vix exertis; ascis clavulatis, aparaphysatis, pedicello mox fluxili suffultis, octosporis, p. spor. 12-15 \times 3-4 pedicello 20-25 μ . longo; sporidiis conglobatis cylindraceutis utrinque obtusis, 3-4 \times 1, e hyalino subchlorinis, minute uniguttulatis.

Hab. ad ramos emortuos Ilicis paraguariensis, Rep. Argentina Amer. austr.

5. *Valsa Myricæ* Jaap, Abh. Bot. Ver. Prov. Brandenb., IL (1907) 4532 p. 17. — Stromatibus gregariis, totum ramum sæpe obtegentibus, rotundatis, 1-2 mm. latis. pustuliformibus, cortice nidulantibus, rostello parvo rotundato truncatis, peritheciis plerumque circumstantibus, immersis, depresso globosis, circ. 0,3 mm. latis, ostioliis confluentibus præditis, plerumque 3-6 in quoque stromate; ascis clavatis, sessilibus, quandoque basi tenuiter angustatis, supra rotundatis, 54-65 \times 7,5-9, tetrasporis; sporidiis cylindraceutis, curvis, rotundatis, hyalinis, 18-24 \times 4-5, sæpe minute et plus minus distincte uniguttulatis, oblique monostichis.

Hab. in ramulis siccis Myricæ Gale prope Geesthacht Hamburg Germania. — Socia adest plerumque *Cytospora Myricæ* Jaap.

6. *Valsa Juglandis* (Schw.) Curr. Trans. Linn. Soc. London XXII 4533 (1858) p. 279 (n. 154) t. 48, f. 145, non *Sphaeria Juglandis* Fr. (quæ *Diplodia*). — Stromatibus et peritheciis generis (non descriptis); ascis octosporis; sporidiis distichis, flavidis, 7,5-10 \times 1,7-2.

Hab. in ramis Juglandis sp. in America boreali.

7. *Valsa Humboldtiana* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4534 Arkiv f. Bot. Bd. V (1905) p. 27. — Stromatibus dense sparsis, cortice immersis, conicis, disco sordide albido, peridermio adherente vix emergentibus, ad basim vix $\frac{1}{2}$ mm. diam.; peritheciis paucis, 6 in quoque stromate, plerumque orbiculatim ordinatis, ellipsoideo-cylindraceutis, sensim in colla ore minutissimo pertusa, prominentia attenuatis, atris, minutissimis; ascis octosporis, anguste clavatis, 45-50 \times 6,5-7,5; sporidiis conglobatis, allantoides v. fere cylindricis, 10-15 \times 2,5.

Hab. in ramulis aridis Salicis Humboldtianæ, Tarija,

Bolivia. — *V. salicina* (Pers.) Fr. affinis, omnibus partibus minoribus diversa.

8. *Valsa chlorina* Patouill., Bull. Soc. Mycol. de Fr. XXII (1906) 4585 p. 56. — Pustulis gregariis, numerosis, ellipticis, epidermide lacerata cinctis, vix 1 mm. long., disco plano nigricante; peritheciis 3-7 in stromate granuloso luteo-viridi dein atro nidulantibus, globosis v. ovoideis, atris, coriaceis, 150-180 \approx 160, nucleo albo in collum 90-180 μ . long., 60 μ . cr., attenuatis, ostioliis atris exsiliantibus; ascis cylindraceis vix stipitatis, 25-30 \approx 5, octosporis; sporidiis distichis, rectis v. leniter curvulis, continuis, hyalinis, 5-6 \approx 2.

Hab. in pericarpio *Cocos nuciferae*, Papenoo Polynesia.

EUTYPELLA (Nits.) Sacc. — Syll. I p. 145, IX p. 460, XI p. 274, XIV p. 484, XVI p. 423, XVII p. 564.

1. *Eutypella Prunastri* (Pers.) Sacc. — Syll. I, p. 147 — f. *Cratægi* 4586 Rehm, Ascom. exsicc. fasc. 46, n. 1894, Ann. Myc. VIII (1910) pag. 302. — Stromatibus intus albo-pruinosis; ascis 30-40 \approx 5-7; sporidiis 10-12 \approx 2,5-3.

Hab. in ramis *Cratægi Oxyacanthæ* prope Weismain in Oberfranken Germaniæ. — Ab *Eut. Cratægi* Berl. satis differt notis allatis.

2. *Eutypella Gleditschiæ* Berlese, Ic. fung. III, p. 73, t. 75, f. 3. — 4537 Stromate late effuso, copioso, crustaceo, atro, per corticem interiorum serpente et haud raro ligno adnato, circa acervulos elevato, eosque ambiente et peridermium attingente; acervulis gregariis subinde confluentibus, tumidis, verruciformibus, orbicularibus, peridermio laciniato cinctis, intus albo-pruinosis; peritheciis in quoque acervulo sat numerosis, monostichis, in colla breviter attenuatis, pruina immersis, globuloso-ovoides, haud raro mutua pressione compressis, ostioliis discretis, parum exsertis, 2-4-sulcatis, nigris; ascis clavatis, parte sporif. 35-40 \approx 6-8; sporidiis allantoides, 10-12 \approx 2, pallide chlorino-luteolis.

Hab. in ramis exsiccatis *Gleditschiæ Triacanthi* in agro Veneto Ital. bor. — Ab *Eutypa ludibunda* acervulis bene definitis dignoscenda. *Eutypellæ Cratægi* affinis. Etiam *Eutypa leprosa* — Syll. I, p. 167 — teste cl. Berlese l. c. est potius *Eutypellæ* sp.

3. *Eutypella Stenocalycis* Syd., Hedwigia XLIX (1909) pag. 80. — 4538 Acervulis gregariis, plerumque rotundatis, pulvinatis, peridermio rupto cinctis, c. 1-1,5 mm. diam., cortice duriore immersis; peritheciis in quoque acervulo plus minusve numerosis, plerumque

4-10, subglobosis, minutis, collis minutis crassiusculis subconvergentibus præditis; ostiolis obtusis, distincte 4-sulcatis; ascis fusoides, longe stipitatis, octosporis, p. sporif. 22-30 \times 4-6; sporidiis superne in asco distichis, inferne monostichis, allantoideis, obtusis, fusciculis, 6-8 \times 2.

Hab. in ramis *Stenocalycis brasiliensis*, Para Americæ austr. (C. F. BAKER).

4. *Eutypella chilensis* Speg., *Fungi chilenses* (1910) p. 29. — *Erum-* 4589
pens, parva, intus extusque nigra; peritheciis minutis dense constipatis brevissime ostiolatis, subglobosis, 120-150 μ . diam.; ascis clavatis aparaphysatis, parte spor. 40 \times 7-8; sporidiis cylindraceis, curvulis, utrinque obtusis, 10-12 \times 2,25-2,50, chlorinis.

Hab. in ramis emortuis *Eugeniæ multifloræ*, Cerro Caracol de Concepcion Chile Amer. austr.

5. *Eutypella citricola* Syd., *Hedwigia* XLIX (1909) p. 80. — *Acer-* 4540
vulis gregariis, rotundatis, pulvinatis, $\frac{3}{4}$ -2 mm. diam., peridermio rupto arete cinctis; peritheciis plus minus numerosis in quoque acervulo, minutis, subglobosis, collis brevibus crassiusculis præditis; ostiolis obtusis, 4-sulcatis; ascis fusoides, longe stipitatis, p. sp. 30-35 \times 4-5, octosporis; sporidiis subdistichis, allantoideis, utrinque obtusis, fusciculis, 6-8 \times 2.

Hab. in ramis *Citri Aurantii*, Parà, Brasilia (C. F. BAKER).

6. *Eutypella Murrayæ* Syd., *Hedwigia* XLIX (1909) p. 80. — *Acer-* 4541
vulis gregariis, rotundatis vel oblongis, peridermio rupto cinctis, ca. $\frac{1}{2}$ -1 mm. longis; peritheciis plerumque 4-8 in quoque stromate, subglobosis, minutis, collis minutis, crassiusculis præditis; ostiolis obtusis, 4-sulcatis; ascis fusoides, longe stipitatis, octosporis, p. sp. 20-30 \times 5-6; sporidiis superne in asco distichis, inferne monostichis, allantoideis, obtusis, fusciculis, 5-7 \times 2.

Hab. in ramis *Murrayæ exoticæ*, Parà, Brasilia (C. F. BAKER).

7. *Eutypella Cordiæ* Syd., *Hedwigia* XLIX (1909) p. 80. — *Acer-* 4542
vulis gregariis, minutis, rotundatis vel irregularibus, $\frac{1}{2}$ -1 mm. diam., peridermio rupto cinctis; peritheciis plerumque 4-8 in quoque acervulo, minutis, ovato-globosis, collis brevibus crassiusculis subconvergentibus præditis; ostiolis obtusis 4-sulcatis; ascis fusoides, longe stipitatis, p. sp. 30-35 \times 4-5, octosporis; sporidiis distichis, allantoideis, utrinque obtusis, fasciculis, 6-8 \times 2-2 $\frac{1}{2}$.

Hab. in ramis *Cordiæ umbraculiferæ*, Parà, Brasilia (C. F. BAKER).

8. *Eutypella Cocos* Ferdinand. et Winge, Vidensk. Meddel. fra den 4543
 naturh. Foren. i Kiøbenhavn (1908) p. 141, tab. IV, fig. 1. —
 Stromatibus e basi irregulariter orbiculari subpulvinatis, 0,5-1 mm.
 diam., atris, in strato exteriori lignoso epicarpium primo immersis,
 deinde epidermidem pustuliformiter levantibus, ostioliis fere solis
 erumpentibus, ceterum velatis, densiuscule sparsis, v. in plagulas
 circ. 1 cm. diam. confluentibus; peritheciis in singulo stromate
 1-20 (plerumque circ. 10), monostiche v. rarius subdistiche stipa-
 tis, 200-300 μ . diam., forma varia, oblongis, subsphæroideis vel
 parum applanatis, collo pro situ plus minusve longiore instructis;
 ostioliis inter se liberis, cylindraceis, apice rotundatis, non sulcatis,
 longitudine plerumque 200-300 μ , 75-100 μ . lat.; ascis anguste cla-
 vatis, superne rotundatis, subsessilibus, parte sp. 18-24 \times 3,5-4,5,
 J -; sporidiis octonis, irregulariter distichis v. subconglobatis, al-
 lantoideis, continuis, hyalinis, leniter curvulis, 4-5 \times 1; paraphysi-
 bus evanidis, ægre conspicuis, ascos longe superantibus (ad 125
 μ . long.).

Hab. in epicarpio sicco *Cocos nucifera* L. in insula St.
 Croix Indiæ occidentalis (F. BOERGESEN).

9. *Eutypella Longiana* Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4544
 matibus gregariis, primitus peridermio innatis, dein prorumpenti-
 bus, atris, demum fere sessilibus, semiglobosis, 2 mm. diam.; pe-
 ritheciis 4-6 monostichis, globulosis, 0,3 mm., collis convergenti-
 bus, ostioliis cylindraceis brevibus, subsulcatis; ascis fusiformibus,
 longe stipitatis, p. sporif. 25 \times 6, 8-sporis; sporidiis allantoideis,
 curvatis, flavidulis, 8-10 \times 2-2,5; paraphysibus nullis.

Hab. ad ramulum? Texas (W. H. LONG jr., comm. ATKINSON).

— *Affinis Eutypellæ radulæ* (B. et Curt.) Berl.

VALSELLA Fuck. — Syll. I p. 158, IX p. 464, XI p. 275, XVII
 p. 567.

1. *Valsella Cratægi* Jaap in Abhandl. Bot. Verein Brandenb. LII 4545
 (1910) p. 148. — Stromatibus gregariis, ramum late obtegentibus,
 e cortice pustulatum elevato erumpentibus; peritheciis numerosis,
 5-12 parum prominentibus, nigris; ascis cylindraceo-clavatis, ses-
 silibus 45-60 (plerumque 50) \times 5-7, demum usque ad 70 μ . long.;
 sporidiis cylindraceis, rotundatis, parum incurvatis, utrinque uni-
 guttulatatis, 5-8 \times 1-1,5.

Hab. in ramis siccis *Cratægi Oxyacanthæ*, prope Triglitz
 in Germania. — *Vals. Salicis* Fuck. affinis.

2. *Valsella alnicola* Berl. Icon. fung. III, p. 107, t. 133, f. 2, *Val-* 4546
sella furva Berl. et Bresad. Microm. trid p. 13, t. I, f. 4, non
 Karst. — Stromatibus conico-truncatis, peridermio leviter pustul-
 latim inflato tectis, disco minuto fuscescente; peritheciis circinan-
 tibus majusculis, collis brevibus ornatis, ostioli integris discum
 vix superantibus; ascis clavatis in stipitem crassiusculum ascos
 longitudine æquantem tenuatis, polysporis, p. sporif. 45-55 \approx 10-
 13; sporidiis dense conglobatis, allantoideis, curvulis, 5-7 \approx 1-1,5
 melleis.

Hab. in ramis Alni glutinosæ emortuis prope Trento in
 agro Tridentino. — A *Valsella furva* Karst. differt stromatibus
 et peritheciis duplo majoribus, ascis quoque majoribus, sporidiis
 melleis etc.

3. *Valsella Pinangæ* Syd., Ann. Mycol. VIII (1910) p. 36. — Stro- 4547
 matibus gregariis, subinde lineariter dispositis, hemisphæricis vel
 ellipticis, 1-2 mm. longis, per peridermium erumpentibus et ejus
 laciniis cinctis; peritheciis 5-8 in quoque stromate, subcircinanti-
 bus, subsphæroideis, ostioli atris, opacis; ascis anguste clavatis,
 apice rotundatis, sessilibus, polysporis, 60-85 \approx 10-14; sporidiis con-
 fertis, cylindræis, rectis vel lenissime curvulis, hyalinis, 6-8 \approx
 1-1 $\frac{1}{2}$.

Hab. ad truncos corticatos Pinangæ, Manila, insul. Philipp.
 (E. D. MERRILL).

EUTYPA Tul. — Syll. I p. 145, IX p. 460, XI p. 274, XIV p. 484,
 XVI p. 423, XVII p. 564.

1. *Eutypa paraphysata* Speg., An. Mus. Nac. Buenos Aires t. XIX 4548
 (1909) p. 331. — Acervulis ligno denudato dealbatoque seriatim
 erumpentibus, intus extusque nigris; peritheciis dense constipatis
 carnosulo-membranaceis 120-130 μ d., olivaceis, in ostiolum nigrum
 breve, crassum, stellatim rugosum productis; ascis parte sporifera
 subfusioidea 50 \approx 6 in pedicellum æquilongum, 40-60 \approx 2-3 productis,
 paraphysibus prælongis crassiusculis cinctis; sporidiis octonis vix
 curvulis, utrinque obtusiusculis atque minute 1-guttulatis, 8-10 \approx
 2-2,5 chlorinis.

Hab. ad ramos cariosos Acaciæ melanoxyli, La Plata
 Rep. Argentina Amer. austr.

2. *Eutypa Tessariæ* Starb., Ascom. Schw. Chaco-Cordill. Exp., Ark. 4549
 f. Bot., Bd. V (1905) p. 27. — Stromatibus corticalibus, ex ma-
 trice in substantiam carbonaceam mutata formati, longe effusi,

irregulariter determinatis, tenuibus, lignum maculis linea nigra limitatis inficientibus; peritheciis densissime constipatis, monostichis, sphaerioideis vel mutua pressione angulatis, ostiolis breviusculis, conicis, latis, tri-quadrigonis vel plerumque irregulariter gibberosis ornatis, conico-prominulis, ad basim concretescentibus, sæpe ad verticem inter se liberis, 200-250 μ . diam.; ascis octosporis, clavatis, longiuscule pedicellatis, 20-30 \times 5-6 (p. sp.); sporidiis conglobatis, allantoideis, olivascentibus, 7,5-10 \times 2,5.

Hab. in caulibus Tessariæ integrifoliæ « bubun » nominatæ, ad Rio Pilcomayo Boliviae. — Species ostiolis irregularibus distincta videtur.

3. *Eutypa lata* (Pes.) Tul. — Syll. I, p. 170 — var. *andina* Speg., 4550 An. Mus. Nac. Buenos Aires t. XIX (1909) p. 331. — Stromatibus sæpius linearibus; peritheciis 250-300 μ . diam.; ascis subclavulatis 75-100 \times 5-7; sporidiis 10-12 \times 2.

Hab. ad ramos emortuos *Tricyclæ spinosæ* in præandinis Cacheuta, prope Mendoza, Rep. Argentina Amer. austr.

4. *Eutypa caulivora* Massee in Bancroft Handb. Diseas. West India 4551 Plants (1910) p. 22, t. III, f. 1-2 (habitus). — Ab *Eutypa erumpente*, cui habitu similis, differt caractere sporarum.

Hab. in caulibus *Para rubber* (quid?) cui plagas nigras superficiales affert in Ind. occid. — Sporidia non descripta!

5. *Eutypa bacteriospora* Rehm, Ascom. exsicc. fasc. 41, n. 1759, 4552 Ann. Mycol. VI (1908) p. 118. — Stromate late effuso, epidermide plus minusve denigrata tecto, tenuissimo, nigro; peritheciis ligno intus linea tenuissima nigra circumscripto immersis, globosis, dispersis, 0,5-1 mm. diam., in collum longum abeuntibus, itaque intra epidermidis rimas transversas 2-4 confluentibus tuberculariformiterque congregatis prominentibus, ostiolis plerumque minutis interdum-usque ad 0,5 mm. cylindraceo-elongatis; ascis clavulatis, longe tenuiter stipitatis, p. spor. 15 \times 5, octosporis; sporidiis allantoideis, curvatis, unilocularibus, utrinque uniguttulatis, dilutissime flavidulis, 4 μ . long., 1,5 μ . lat.; paraphysibus?

Hab. ad ramulos plantæ scandentis, Sao Leopoldo Rio Grande do Sul Brasiliæ (Rick). — Ab *E. atomospora* (Cooke) Sacc., peritheciis ligno profunde immersis præcipue differt.

6. *Eutypa ludibunda* Sacc. — Syll. I, p. 177. — 1. f. *Anonæ Chermolæ* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 330. — Acervulis corticulis noduloso-prominulis extus sordide nigris, ostiolis brevibus crassis stellato-rimosis ornatis, intus candidis; perithe-

ciis dense constipatis mediocribus 200 μ . diam.; ascorum parte sporifera subcylindracea $30 \times 4-5$, pedicellum gracile æquante, paraphysibus nullis; sporidiis vix curvulis. — 2 f. *Casuarinæ strictæ* Speg., l. c. — Acervulis ligno denudato superficialibus irregulariter nodulosis extus intusque nigris; peritheciis polystichis subcarbonaceis 180 μ . diam.; ascorum parte sporifera subfusioidea $40-50 \times 5$, pedicello gracili duplo brevior suffulta, paraphysibus nullis; sporidiis vix curvulis $10 \times 2-2,5$ chlorinulis. — 3. f. *Luheæ grandifloræ* Speg., l. c. p. 330. — Corticola, dense congesta, latissime ambiens intus extusque atra; peritheciis mediocribus 180-200 μ . diam.; ascorum parte sporifera subclavulata, $50-55 \times 10$ deorsum in stipitem gracilem vix longiorem productis, paraphysibus nullis; sporidiis leniter curvulis $10-12 \times 3$ e hyalino subchlorinis. — 4. f. *Macluræ aurantiacæ* Speg., l. c. p. 300. — Acervulis et peritheciis ut in præcedenti; ascorum parte sporifera $40-45 \times 5$, pedicello vix brevior suffultis, paraphysibus nullis; sporidiis leniter curvulis 10×2 , chlorinulis. — 5. f. *Ricini communis* Speg., l. c. p. 331. — Stromatibus effusis totam matricem nigrificantibus; peritheciis subeutypeis laxiuscule gregariis 150-200 μ . diam., ascorum parte sporifera subcylindracea $50 \times 6-7$ pedicello subtriplo longior impositis, paraphysibus nullis; sporidiis rectiusculis $10-12 \times 2$, subhyalinis. — 6. f. *Solani verbascifolii* Speg., l. c. p. 331. — Acervulis et peritheciis ut in f. tertia; ascis sporidiisque ut in præcedenti. — 7. f. *Tamaricis africanæ* Speg., l. c. p. 331. — Acervulis et peritheciis ut in forma secunda, ascis et sporidiis ut in præcedenti.

Hab. f. 1 prope Tucuman, f. 2, 3, 6 prope Santa Catalina, f. 4 prope Marmol, f. 5, 7 prope La Plata, Rep. Argentina America austr.

7. *Eutypa linearis* Rehm, Ann. Mycol. V (1907) p. 523. — Stromatibus linearibus, parallele seriatis, rectis, epidermide tectis, dein ea nigrificata et longitudinaliter discissa, elevatis, utrinque marginaliter obtectis, 0,5-3 cm. longis, vix 1 mm. latis, extus atris; peritheciis arcte monostiche aggregatis, globulosis, minutissime papillulatis, contextu parenchymatico membranaceo, fusco, glabris, ca. 250 μ . diam., sub cortice liberis; ascis fusiformibus longissime tenuiter stipitatis, p. sporif. ca. 60 μ . longa, 8-sporis; sporidiis allantoideis, curvatis, utrinque obtusis, 1-cellularibus, hyalinis v. dilutissime flavidulis, $5-7 \times 2$, di-tristichis; paraphysibus nullis.

Hab. in culmo Arundinariæ, Sao Leopoldo, Rio Grande do

Sul, Brasilia (Rick). — Affinis *Eutypæ phaselince*, sed peritheciis: in stromate laxioribus et vix papillatis distincta.

PERONEUTYPA Berl. — Syll. XVII p. 609.

1. *Peroneutypa heteracantha* (Sacc.) Berl. — Syll. XVII, p. 569 — 4555

1. f. *Arundinis Donacis* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 329. — Ascis, parte sporifera, 14-20 \times 4-5; sporidiis 5-6 \times 1-1,25. — 2. f. *Anonæ Cherimoliæ* Speg., l. c. — Ascorum parte sporifera 15 \times 3-4; sporidiis 4-5 \times 1. — 3. f. *Casuarinæ strictæ* Speg., l. c. — Ascorum parte sporifera 15-18 \times 3-4; sporidiis 5 \times 1. — 4. f. *Ricini communis* Speg., l. c. — Peritheciis 400-800 μ . diam., ascorum parte sporifera 12-20 \times 5-7; sporidiis eximie curvulis 4-5 \times 1,25.

Hab. ad matrices indicatas, Rep. Argentina Amer. austr.

2. *Peroneutypa tuyutensis* Speg. — Syll. I, p. 163. — 1. f. *Abuti-* 4556

lonis asiatici Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 329. — Peritheciis maximis 750-1000 μ . diam.; ascorum parte sporifera 12 \times 3-4; sporidiis curvatissimis 4-5 \times 1. — 2. f. *Arundinis Donacis* Speg., l. c. — Cum præcedente omnino conveniens. — 3. f. *Chænocephali macrophylli* Speg., l. c. p. 330. — Peritheciis 150-300 μ . diam., ascorum parte sporifera 14-18 \times 4-5; sporidiis modice curvatis 4 \times 1. — 4. f. *Citri Limettæ* Speg., l. c. p. 330. — Præcedenti simillima; sporidiis valde curvatis 5 \times 1. — 5. f. *Phytolacæ dioicæ* Speg., l. c. p. 330. — Peritheciis 230-500 μ . diam.; ascis 15 \times 4; sporidiis validissime curvatis 4 \times 1. — 6. f. *Solani verbascifolii* Speg., l. c. p. 330. — Cum præcedente omnino conveniens.

Hab. formæ 1, 2, 5, 6 prope Santa Catalina, 3 prope Tucumán, 4 prope Orán, Argentina Amer. austr.

3. *Peroneutypa exigua* Syd., Hedwigia XLIX (1909) p. 81. — Stro-

mate late effuso, crustaceo, peridermio tecto, nigerrimo; peritheciis cortici interiori immersis, sparsis vel sæpius pluribus (3-15) acervulato-collectis, globulosis, minutis, mono-distichis, in collum longiusculum productis; rostellis plerumque per rimam fasciculato-erumpentibus, rigidis, tereti-cylindræis, parallele erectis, c. $\frac{1}{2}$ - $\frac{3}{4}$ mm. longis, glabris, obtusis, aterrimis; ascis fusioideo-clavatis, apice rotundatis, basi in pedicellum longum attenuatis, p. sp. 11-16 \times 3-6, octosporis; sporidiis superne inasco distichis v. conglobatis, inferne monostichis, allantoideis, minutissimis, hyalinis vel dilutissime fusciculis, 3-3,5 \times 1-1,5.

Hab. ad corticem Citri Aurantii, Pará America austr. (C. F. BAKER).

4. *Peroneutypa valdiviana* Speg., Fungi chilenses (1910) pag. 29. — 4558
Stromate superficiem ligni late nigrificante; peritheciis globosis, 0,8-1,5 mm. diam., sparsis v. pauci-gregariis, ligno immutato infossis v. tantum insculptis vix papillato-ostiolatis; ascis pusillis clavulatis, 18×5 , octosporis; sporidiis cylindraceis, guttulatis, $5-6 \times 1$, curvulis, subchlorinis.

Hab. in ramis emortuis Aristotelie Macqui, Bahia de Corral Chile Amer. austr. — Affinis *P. heteracanthæ* (Sacc.).

5. *Peroneutypa cylindrica* (K. et C.) Berl. — var. *Euphorbiæ* Theiss. 4559
Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 401. — Peritheciis immersis, atris, 200-280 μ . diam., singulis v. geminatis, non vero fasciculatis, papilla cylindrica obtusata erecta, 380-460 μ . alt., 80-110 μ . cr. (v. obclavatis, basi c. 170 μ . supra 75-90 μ . cr.); ascis clavatis breviter pedicellatis, $24-27 \times 4$; sporidiis distichis, allantoideis, hyalino-flavidulis, biguttulatis, $4-5 \times 1$.

Hab. in caule sublignoso Euphorbiæ sp. Sao Leopoldo Rio Grande do Sul Brasilia (J. RICK).

6. *Peroneutypa asperima* Syd., in De Wildem., Flore du Bas- et 4560
Moy. Congo, t. III, fasc. I (1909) Extr. p. 15. — Stromatibus in cortice interiore late expansis, planis, 1-4 cm. longis, 1-2 mm. cr., effusis, sed bene limitatis, intus extusque atris, duris, ubique ostioli longe prominentibus crebris æqualiter distributis asperatis; peritheciis monostichis, subglobosis, c. 300 μ . diam.; ostioli rigidis, atris, glabris, c. 0,50-0,75 mm. longis; ascis clavatis v. fusoides, longe pedicellatis, p. sp. $16-20 \times 3-4$, octosporis; sporidiis allantoideis, leviter curvulis, hyalinis, continuis, utrinque minute 1-guttulatis, c. $3,5 \times 1$.

Hab. ad cortices, Kisanu Congo Africæ (VANDERYST).

PERONEUTYPELLA Berl. — Syll. XVII p. 569.

1. *Peroneutypella corynostomoides* Rehm, Ascom. exsicc. fasc. 41, 4561
n. 1760, Ann. Mycol. VI (1908) p. 119. — Stromate late effuso, peridermio tecto, a corticis substantia heterogeneo, crustaceo, nigro, hinc inde circa perithecia acervulatim collecta parum elevato; acervulis gregariis, 1-2 mm. diam., vix tumidulis; peritheciis cujusque acervuli in hypodermio supra lignum nigro-cinctis, 10-15 rarius 1-5, globulosis, 0,5-0,7 mm. diam., collis longis, fasciculatim prorumpentibus, cylindraceis, extra peridermium demum divergen-

tibus, scabriusculis v. rugulosis, interdum subconoido-elongatis apiceque acutatis, ostioliis plerumque obtusis, 3-4 sulcatis, conoideis, 1-3 mm. long., 0,4 mm. lat., fusco-nigris; ascis clavatis, longe stipitatis, p. sporif. $25 \approx 6$, octosporis; sporidiis oblongis, obtusis, vix allantoides, unilocularibus, uniguttulatis, subfuscis, $5-6 \approx 2$, distichis; paraphysibus filiformibus, septatis, 3 μ . cr.

Hab. ad ramum arboris frondosæ, Sao Paulo Rio Grande do Sul Brasiliæ (Rick). — *Per. corynostomæ* (B. et R.) Berl., affinis, sed differt stromatibus et peritheciis validioribus, sporidiis brunneis vix incurvatis.

2. *Peroneutypella applanata* Syd., in De Wildem., Flore Bas- et Moy. 4562 Congo t. III, fasc. I (1909) Extr., p. 16. — Stromatibus effusis, peridermio tectis, atris, carbonaceis, 3-8 mm. latis, $\frac{1}{2}-\frac{3}{4}$ mm. cr.; peritheciis hinc inde aggregatis, 1-2-stichis, globulosis, 0,2-0,3 mm. c. diam.; ostioliis numerosis, per peridermium erumpentibus, cylindraceis, glabris, rectis, c. 1,5 mm. longis, versus apicem subacutatis; ascis clavatis, p. sporif. c. $20 \approx 4$, octosporis; sporidiis oblongis, sæpe leviter curvulis, utrinque rotundatis minuteque guttulatis, hyalinis, continuis, c. $3,5-4,5 \approx 1,5-2$, distichis.

Hab. ad cortices Kisanu Congo, Africæ (VANDERYST).

3. *Peroneutypella Noackii* Rehm, Ann. Mycol. V (1907) p. 523. — 4563 Stromatibus emergentibus, dein in cortice interiore libere sessilibus, gregariis, orbicularibus, semiglobosis, atris, carbonaceis, 0,5-1 cm. diam., 3 mm. alt., ostioliis plurimis cylindraceis, glabris, rectis, 2 mm. longis, versus apicem subacutatis obsessis, intus nigro-cinereis; peritheciis 2-3-stichis, globosis, plurimis, c. 0,3 mm.; ascis clavatis, p. sporif. $20 \approx 5$, octosporis; sporidiis cylindraceis, curvulis, hyalinis, 1-cellularibus, $4 \approx 1$ distichis; paraphysibus nullis.

Hab. in cortice arboris, Sao Francisco dos Campos, Prov. Sao Paulo Brasilia (Noack). — Stromate ostioliis omnino cooperto et innumera perithecia fovente mox dignoscenda species.

4. *Peroneutypella obesa* Syd., in De Wildem. Flore Bas- et Moy. 4564 Congo t. III, fasc. I (1909) Extr. p. 16. — Stromatibus emergentibus, dein in cortice interiore libere sessilibus, gregariis, orbicularibus, semiglobosis, atris, carbonaceis, 0,8-1,5 cm. diam., usque ad 1 cm. altis, sæpe dense confertis et subconfluentibus, e mutua pressione angularibus, intus nigro-cinereis; peritheciis plurimis, 3-5-stichis, globosis, 0,5-0,6 mm. diam.; ostioliis numerosissimis, cylindraceis, glabris, rectis, 2-4 mm. longis, versus apicem subacutatis; ascis fusoido-clavatis, longe pedicellatis, p. spor. $10-12 \approx 4$,

octosporis; sporidiis minutissime allantoideis, hyalinis, continuis, utrinque minutissime 1-guttulatis, $2-2,5 \approx 1$.

Hab. ad cortices, Kisanu Congo, Africa (VANDERYST). — *A. Per. Noacki* Rehm differt stromatibus majoribus, ostiolis magis elongatis et characteribus sporidiorum.

ENDOXYLEA Fuck. — Syll. I p. 181, IX p. 469, XI p. 275, XVII p. 570.

1. *Endoxyla Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4565 (1908) pag. 118. — Peritheciis sparsis, ligno denudato immersis, stromate heterogeneo extus fuscescente, intus albescente linea nigra tenui limitato cinctis, globosis, 300-600 μ . diam., tenui-membranaceis, fuscis, ostiolo brevissimo vix manifesto coronatis; ascis numerosis constipatis antice clavulatis, $14-16 \approx 3-4$, pedicello duplo longiore mox fatiscente suffultis, octosporis, aparaphysatis; sporidiis cylindraceis leniter curvulis utrinque obtusis $4-5 \approx 1$, hyalinis, minute uniguttulatis.

Hab. ad ramos emortuos decorticatos Ilicis paraguayensis in silvis circa San Pedro Argentinae Amer. austr.

2. *Endoxyla Mangiferæ* P. Henn., Hedwigia XLVII (1908) p. 258. 4566 — Stromatibus ligno innatis peritheciis gregariis immersis, atris, ostiolis subulatis superantibus; ascis stipitatis clavatis, 8-sporis, $30 \approx 6$; sporidiis subdistichis cylindraceis, curvatis, fusciculis, $6-7 \approx 2$.

Hab. in ligno emortuo Mangiferæ indicæ, Mindanao, Davao Ins. Philippin. (COPELAND).

CRYPTOSPHERIA Grev. — Syll. I p. 182, IX p. 470, XIV p. 486, XVI p. 426.

1. *Cryptosphæria ? Cumingii* Speg., Fungi Chilenses (1910) pag. 82 4567 cum icon. — Peritheciis epidermide subrelaxata stromaticeque nigricata tectis, laxe gregariis, lenticularibus minutis carbonaceis, 150 μ . diam.; ascis subcylindraceis modice attenuato-pedicellatis paraphysatis $65-70 \approx 7-8$; sporidiis subdistichis subfusoides, parvis, pallide olivaceis, 3-septatis leniter constrictulis, $16-18 \approx 4$, loculo medio supero non v. vix subcrassiore.

Hab. in culmis siccis putrescentibus Chusqueæ Cumingii Cerro Alegre de Valparaiso Chile Amer. austr.

2. *Cryptosphæria curvispora* Starb., Ascom. Schwed. Chaco-Cordill. 4568 Exp., Arkiv f. Bot. Bd. V (1905) p. 28. — Stromate nullo, nisi matricis superficie ex fungillo obsessa paullum elevata indicato;

peritheciis discretis, interdum nonnullis confluentibus et acervulatum erumpentibus, plane in cortice immersis, basi non ligno affixis, globosis, ostioli longiusculis, cylindricis, superne paululum dilatatis, 4-6-sulcatis vel potius verruculis 4-6 ornatis, ore latiusculo pertusis prominulis, membranaceis, atratis, 300-500 μ . diam.; ascis octosporis, clavatis, 10-15 \approx 4-5 (p. sp.; sporidiis conglobatis, allantoideis, valde curvatis, fuscidulis, 2,5-3 \approx 1,5; paraphysibus nullis.

Hab. ad ramos Soururo, inter Tarija et Chaco Boliviae. — Fungillus minutie partium interiorum nec non ostioli mox dignoscendus.

CRYPTOSPHERELLA Sacc. — Syll. I p. 186, IX p. 470.

1. *Cryptosphærella Anonæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4569 (1909) p. 333. — Stromate latissime effuso, cortice immutato nidulante, ligno vix cinerescente insidenti; peritheciis hinc inde dense constipatis corticem subtumefacientibus carbonaceis tenuibus, e globoso ellipsoideis 300-500 \approx 250-300, ostiolo minuto carbonaceo vix exerto coronatis; ascis 32-sporis, paraphysatis antice obtusiusculis postice modice graciliterque attenuato-pedicellatis, p. spor. 80 \approx 15-20, ped. 30-40 \approx 5; sporidiis leniter curvulis 12 \approx 2,5-3 utrinque obtusiusculis, eguttulatis, chlorinis.

Hab. ad ramos dejectos putrescentes *Anonæ Cherimoliæ* prope Tucuman Argentina, Amer. austr.

2. *Cryptosphærella Mate* Spegazz., Ann. Mus. Nac. Buenos Aires 4570 t. XVII (1908) p. 119. — Stromatibus ligno denudato vii infusato prominulis, linearibus, colliculosis extus sordide pallescentibus; peritheciis minutis stromate hinc inde gregariis vix papillulato-ostiolatis, globosis 125-350 μ . diam.; ascis paraphysatis clavatis longe pedicellatis, parte spor. 75-80 \approx 12, stipite longiusculo 75-100 μ . long., 32-48-sporis; sporidiis conglobatis e cylindraneo naviularibus, chlorinis, 8-16 \approx 3, minute 1-guttulatis.

Hab. ad ramos aridos subputrescentes decorticatosque *Ilicis paraguariensis* in dumetis prope San Pedro Argentina, Amer. austr.

CRYPTOVALSA Ces. et De Not. — Syll. I p. 187, IX p. 471, XI p. 276, XIV p. 487, XVI p. 426, XVII p. 567.

1. *Cryptovalsa chilensis* Speg., Fungi chilenses (1910) p. 30. — Pe- 4571 ritheciis dense constipatis numerosis carbonaceis subsuperficialibus

globosis parvis eximie breveque papillato-ostiolatis, 250-300 μ . diam.; ascis clavulatis apice subtruncatis, aparaphysatis 32-sporis, 120 μ . long., parte spor. 70-80 \times 8-10; sporidiis 2-3-stichis, cylindraceis, fumosis, 9-11 \times 1,5-2, utrinque obtusis.

Hab. ad ramos siccos vetustos decorticatos Proustiae pungentis, Bатуco Chile Amer. bor.

2. **Cryptovalsa Yuccæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4572

(1909) p. 332. — Substrato denudato dealbatoque (an causa heterogenea?); stromatibus effusis sublinearibus extus nigris intus albis (10-15 mm. long., 3-6 mm. lat.), planiusculis; peritheciis hinc inde gregariis monostichis, acervulos prominulos irregulariter subhemisphaericos 1-3 mm. diam. efficientibus, parvulis, 150 μ . diam., ostiolo carbonaceo vix exertulo coronatis; ascis antice obtusis postice sensim attenuato-pedicellatis 100-120 \times 12-15; sporidiis cylindraceis utrinque obtusiusculis 7 10 \times 2 eguttulatis, leniter curvulis.

Hab. ad scapos florales exaridos putrescentes Yuccæ gloriosæ in hortis La Plata, Argentina Amer. austr. — *Crypt. Nitschkei* affinis, ascis majoribus matriceque dealbata recedens.

DIATRYPE Fr. — Syll. I p. 191, IX p. 472, XI p. 276, XIV p. 437, XVI p. 426, XVII p. 571.

1. **Diatrype valdiviensis** Speg., Fungi Chilenses (1910) pag. 30, cum 4573

icon. — Stromatibus parvis erumpenti-superficialibus squarrulosis sordide fusciscentibus, intus albescentibus; peritheciis 4-20 constipatis, globosis, parvis, stromate immersis, fulvo-fusciscentibus; ascis clavulatis longiuscule pedicellatis, aparaphysatis, parte spor. 30-40 \times 5-6; sporidiis cylindraceis utrinque obtusis 8-9 \times 2, subguttulatis subchlorinis.

Hab. in ramis emortuis Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr.

2. **Diatrype annulata** Theiss., Beih. Bot. Centralbl. XXV Bd. (1910) 4574

Abt. II, p. 401. — Stromatibus gregariis, discretis, erumpentibus, corticis laciniis cinctis, semigloboso-pulvinatis, 0,7-1,2 mm. diam., opacis, nigris, asperulis, intus albis; peritheciis globosis, e latere plerumque compressis, 2-5 in quoque stromate, parietibus tenuibus, 250-400 μ . diam., papilla minuta, hemisphaerica nigro-opaca, annulo fusco applanato cinctis; ascis cylindraceis, modice pedicellatis, supra rotundatis, p. sp. 28-32 \times 5-6; sporidiis vermicularibus hyalino-flavidulis, distichis, 7-9 \times 2-2,5.

Hab. ad ramos siccos Compositæ cujusdam, Sao Leopoldo

Rio Grande do Sul Brasilæ. — *Diatrype asterostomati* B. et C. affinis.

3. *Diatrype Baccharidis* Earle, Bull. of the New York Bot. Gard. 4575 (1904) p. 295. — Stromatibus dense sparsis, quandoque prominentibus, fibris ligneis cinctis, demum nudis, nigris, rugosis, stromate parco, intus obscure flavido-brunneis, 1 mm. circ. cr., sæpe subconfluentibus; peritheciis 3 v. 4 ad 6-8 in quoque stromate, latis, 300-500 μ ., subangulosis, intus nigris, ostiolis superficiem rugulosam reddentibus, compressis v. obscure bisulcatis (subhysterioideis), collo brevi; ascis clavatis, circ. 70 \times 7; sporidiis curvis, cylindricis, flavidis, 12-14 \times 2-3.

Hab. in caulibus emortuis *Baccharidis* sp., Stanford Univ. California Amer. bor. (C. F. BAKER).

4. *Diatrype leucoxantha* Rehm in Rehm et Rick in Broteria V (1906) 4576 p. 226. — Stromatibus gregariis demum liberis in ligno denudato atroquinato sessilibus, irregulariter orbicularibus, 1-1,5 mm altis, 2-4 mm. latis, basi subcontractis, glabris, vertice applanatis, undulato-verruculosis, nigro-fuscis, carbonaceis, intus sub cortice strato albo præditis, sub peritheciis flavo; peritheciis 10-12 arcte congregatis, monostichis, globosis, 0,7-0,8 mm. diam. papillis minutissimis in vertice stromatis conspicuis; ascis tenerrimis, longissime stipitatis, parte sporifera fusiformi, 20-30 \times 5; sporidiis alantoides, dilute flavidulis 1-cellularibus, 7,5 \times 2, octonis, distichis; paraphysibus?

Hab. in ligno arboris frondosæ in Brasilia. — *Diatr. chlorosarcæ* affinis.

5. *Diatrype mindanaensis* P. Henn., Hedwigia XLVII (1908) p. 258. 4577 — Stromatibus innato-erumpentibus dein superficialibus gregariis, pulvinatis v. orbiculare disciformibus, atro-carbonaceis, rugulosis, 1-1,5 mm. diam., loculis immersis numerosis, globulosis; ascis stipitatis clavatis, 8-sporis; sporidiis subdistichis, cylindraceis, curvulis, fuscidulis, 6-7 \times 2.

Hab. in ramulis siccis arboris, Mindanao, San Ramon, Zamboanga Ins. Philippin., majo 1904 (COPELAND).

6. *Diatrype utahensis* Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4578 matibus dispersis, sub cortice nidulantibus, prorumpentibus, lacinis corticis arcte adhærentibus cinctis, subconoideis, apice truncatis, a matricis substantia heterogeneis, extus atris, intus fuscidulis, 1-1,5 mm. diam.; peritheciis monostichis, globulosis, ca. 300 μ . diam., haud numerosis, ostiolis vix in disco stromatis conspi-

cuis; ascis fusiformibus, stipitatis, 55-60 \times 9, octosporis; sporidiis oblongis vel subcurvatulis, hyalinis, 1-cellularibus, 12-14 \times 4, distichis; paraphysibus

Hab. in ramulo? Rock Canyon, Proro, Utah 2700 m. alt. U. St. Am. (Miss FLETCHER, comm. ATKINSON). — Subaffinis *D. verrucoidi*, sed sporidia non vere allantoidea, minora et ostiola non stellato-sulcata.

7. *Diatrype Fletcheri* Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4579
matibus gregariis, seriatim aggregatis, sub cortice nidulantibus, prorumpentibus, laciniis vix adhærentibus cinetis, a matricis substantiâ heterogeneis, orbicularibus, convexulis, extus nigris, 2-4 mm. diam., intus fuscidulis; peritheciis permultis, monostichis, stromate immersis, globulosis, ca. 300 μ . latis, collo brevi instructis, papillis parvulis conoideis plus minusve prominentibus, contextu parenchymatico violaceo-brunneo; ascis fusiformibus, tenerimis, longe stipitatis, p. sporif. 40-45 \times 10, tetrasporis; sporidiis oblongis, rectis, vix aliquantulum curvatulis, hyalinis, 1-cellularibus, 12-15 \times 5, monostichis; paraphysibus . . .

Hab. ad ramulos? Rock Canyon, Proro, Utah, U. St. Am. c. 2700 m. alt. (Miss FLETCHER, comm. ATKINSON). — Subaffinis forte *Diatr. Macluræ*.

8. *Diatrype infuscans* Ell. et Ev. North Amer. Pyren. (1892) p. 571. 4580
— Stromatibus gregariis, 1-1,5 mm. diam., conico-hemisphæricis v. tuberculiformibus, epidermide nigricante tectis, apice prominentibus; peritheciis 3-6 in quoque stromate, globosis, 250-350 μ . diam., parietibus tenuibus donatis, apice collo brevi contractis et ostiolo lato tuberculiformi præditis; ascis basi anguste stipitatis, parte sp. 25 \times 4, octosporis, paraphysibus filiformibus obvallatis; sporidiis distichis, allantoideis, leniter curvulis, pallide flavidis, 5-6 \times 1,2-1,5.

Hab. in ramis emortuis *Smilacis* sp., Houston Texas Amer. bor. (RAVENEL). — A *Diatr. smilacicola* (Schw.) sporidiis et stromate diversa.

9. ? *Diatrype petiginosa* Fr. in litt. ad Mougeot, Currey in Trans. 4581
Linn. Soc. XXII (1858) p. 271, n. 87, t. 46, f. 86. — Stromatibus verrucosis; peritheciis generis (non descriptis). ascis fusoido-clavatis, deorsum sensim tenuato-stipitatis, octosporis; sporidiis subdistichis, allantoideis, utrinque subrotundatis, leviter curvis, 10-15 \times 2-2,5, flavidis.

Hab. ad cortices in ? Vogesis.

Syll. fung. XXII (VIII-1912)

DIATRYPELLA Ces. et De Not. — Syll. I p. 200, IX p. 477, XI p. 277, XIV p. 488, XVI p. 427, XVII p. 572.

1. *Diatrypella Missionum* Speg., Annal. Mus. Nac. Buenos Aires t. XVII 4582 (1908) p. 119. — Stromatibus cortice innatis erumpenti-prominulis verruculosus nigris, irregulariter ellipsoideis, 4-5 mm. long., 2-3 mm. lat., 1,5 mm. alt.; peritheciis monostichis immersis constipatis globosis 350-400 μ . diam., brevissime crasseque ostiolatis; ascis fusosideo-clavulatis antice acutis postice breviter pedicellatis, aparaphysatis, polysporis, 80-100 \times 10-12; sporidiis conglobatis cylindraceis leniter curvulis, utrinque obtusiusculis 4-8 \times 1. chlo-rinulis, minute uniguttulatis.

Hab. ad ramos emortuos adhuc pendulos Ilicis paraguayensis in silvis Campo das Cuías Rep. Argentina Amer. austr. — *D. verruciformi* (Ehrh.) Nits. affinis sed ascis fusosideis apice acutis breviter pedicellatis sporidiisque tenuioribus sat distincta.

2. *Diatrypella Persicæ* Rick, Broteria IV (1905) p. 162. — Stroma- 4583 tibus prorumpentibus, corticem in 3-4 partes dilacerantibus, ceterum cortice ad mediam altitudinem tectis, parum prominentibus, foraminibus inter se junctis materia stromatica, vix conspicuis, nigris; peritheciis pluribus, orbicularibus, parvis, ordine congestis inter lignum et epidermidem nidulantibus, lignum circulis nigris circumscribentibus; ascis longe pedicellatis, multisporis, parte sp. 100-150 \times 10-12; sporidiis 14-17 \times 4, flavovirentibus; paraphysibus dilutis.

Hab. in ramis Persicæ vulgaris, Torres Vedras Lusitaniæ.

3. *Diatrypella inflata* Rick, Broteria V (1906) pag. 48. — Stromate 4584 pulvinato, 2 mm. diam., lobis epidermidis arcuato cincto, extus intusque atro; peritheciis inter lignum et epidermidem nidulantibus, 1 mm. latis, atris, 3-10 unitis, ostioli obtusis; ascis longissimis, parte spor. 80-100 \times 15, juvenilibus versus apicem in capitulum sphaericum inflatis, quod in multis semper manet, ceterum ventricosus, polysporis; sporidiis viridi-flavis, conglobatis, 6-8 \times 2, plerumque curvulis.

Hab. in ramis Nerii Oleandri, Rio Grande do Sul Brasiliæ. — An eadem ac *Diatr. platensis* Speg.?

4. *Diatrypella Lantanæ* Earle, Bull. of the New York Bot. Gard. 4585 (1904) p. 311. — Stromatibus sparsis, prominentibus, epidermide cinctis, intus extusque nigris, stromate parco, plerumque ellipsoideis, circ. 1 \times 0,75 mm.; peritheciis in quoque stromate 4-10, nigris, globosis, 400-500 μ . diam., ostiolo brevi, levi, umbilicato;

ascis late clavatis, sporidiis fartis, breviter stipitatis, 70-80 \times 10-12; sporidiis numerosissimis, allantoideis, flavis, circ. 7 \approx 1,5.

Hab. in ramis emortuis *Lantane Camaræ*, Hog Island Florida (S. M. TRACY).

5. *Diatrypella decorata* Nits. — Syll. I, p. 203. — Var. *major* Berl. 4586
Icon. fung. III, pag. 119, t. 158. — A typo differt stromatibus ascisque majoribus, magis regularibus, non rugosis; ascis 45-50 \times 6-7 p. sporif.; sporidiis 4-5 \approx 1, vix viridulis.

Hab. in ramis *Fagi* in agro Romano. — Affinis quoque *D. verruciformi* sed stromatibus minoribus, non rugosis, ostiolis eximie 4-5-sulcatis, ascis tenuioribus mox dignoscenda.

6. *Diatrypella macrotheca* Starb., Ascom. Schwed. Chaco-Cordill. 4587
Exped., Arkiv f. Bot. Bd. V (1905) p. 26. — Stromatibus basi ligno affixis, vix penetrantibus, per peridermium erumpentibus, gregariis, tubercularibus, ellipsoideis v. fere sphaeroideis, $\frac{1}{2}$ -2 mm. diam., sæpe et longitudinaliter et transversim confluentibus, usque ad 5 mm. longis, atratis vel potius obscure rufo-furfuraceis, intus demum pulveraceis, candidis; peritheciis paucis, mono-polystichis, ovoideo-sphaeroideis, mutua depressione difformibus, ostiolis latis, primo quadrangulatis limitatis et quadrisulcatis, deinde orbicularibus, umbilicatis, margine lenissime radiatim sulcatulo, c. 200 μ . diam.; ascis polysporis, longissime pedicellatis, parte sporifera clavata, sursum obtuse rotundatis, 130-190 \approx 11,5-17, p. spor. c. 75 μ . long.; sporidiis conglobatis, olivaceis, solitariis hyalinis, allantoideis, 5-7 \approx 1,5-2; paraphysibus nullis.

Hab. in ramis aridis, Prov. Jujuy, Quinta, pr. Laguna de la Brea, Argentina. — Species ascis longissimis, ostiolis perithecorum distincta videtur.

7. *Diatrypella Fourcroyæ* Vouaux, Bull. Soc. Myc. Fr. (1910) p. 155. 4588
— Stromatibus irregularibus, verrucæformibus, plerumque ellipsoideis, 0,75-1,5 mm. long., 0,5-1 mm. latis, gregariis, disco tantum emergentibus, peridermio innatis insidentibusque ligno, cujus superficiem totam nigrificantibus, nigris; peritheciis paucis, 1-6, sæpius 2- vel 3 in singulo stromate, subglobosis, dense stipatis, ostiolo brevi parumque prominulo, levi v. sulcato instructis; ascis longissime pedicellatis, clavatis, parte spor. 50-60 \times 12-13; stipite 100-120 μ . long.; sporidiis numerosis præditis, pseudoparaphysatis; allantoideis, curvulis, fuscidulis, 5 \approx 1.

Hab. in caule *Fourcroyæ giganteæ*, Magenta prope Nouméa, Nova-Caledonia (Cacot).

Sect. 2. Hyalosporæ.

CRYPTOSPORELLA Sacc. — Syll. I p. 466, IX p. 609, XIV p. 525, XVI p. 468, XVII p. 592.

1. *Cryptospora* *Wagneriana* Rehm, Ann. Mycol. IV (1906) p. 475. 4589
— Stromatibus valsoideis, cortice plane immutato omnino immer-
sis, gregariis, seriatis, corticem extus denigratum sublevantibus,
nulla linea circumscriptis; peritheciis c. 12, globosis, 0,1-0,2 mm.
diam., laxe orbiculariter positis, collis tenuissimis in disculo rugu-
loso, suborbiculari, flavidulo, c. 0,25 mm. lat. conjunctis; corticem
superantibus ibique ostiolis minutissimis nigris conspicuis; ascis
oblongo-ellipsoideis, 60-70 \times 15, octosporis; sporidiis oblongis, u-
trinque rotundatis, rectis v. curvulis, unilocularibus, hyalinis, 18-
27 \times 6-7, distichis.

Hab. in ramis emortuis *Aceris Pseudoplatani*, Wint-
berger Saxonia, Germania. — A *Cr. Niesslii* differt præcipue spo-
ridiis majoribus oblongis nec fusoides.

2. *Cryptospora* *eupatoriicola* Rehm, Ann. Mycol. V (1907) p. 525. 4590
— Stromatibus ramulum hypertrophicum ambientibus, arcte con-
gregatis, hemisphæricis, peridermio demum extus nigrescente te-
ctis, cortice intus linea nigra non circumscripto innatis; peritheciis
c. 5 globosis, membranaceis. 0,7-1 mm. diam., irregulariter con-
glomeratis, collis in disculum suborbicularem convergentibus, pa-
pillulis nigris, hemisphæricis atris, poro vix perspicuo pertusis,
demum scabriusculis verrucose prominentibus; ascis fusiformibus,
c. 50 \times 15, octosporis; sporidiis oblongis, utrinque rotundatis, 12-
15 \times 5-6, subhyalinis, strato mucoso obductis, 1-cellularibus; para-
physibus nullis.

Hab. ad ramulum *Eupatorii bupleurifolii*, Tubarao Bra-
silia (ULE, comm. PAZSCHKE).

Sect. 3. Phæosporæ.

ANTHOSTOMA Nits. — Syll. I p. 293, IX p. 514, XI p. 283, XIV
p. 503, XVI p. 441, XVII p. 635.

1. *Anthostoma acerinum* Ell. et Fairm., The Pyren. of Orleans Co. 4591
unty in Proceed. Rochest. Acad. IV (1905) pag. 189. — Stromate

valsoideo, 1 mm. cr., ligno infosso; peritheciis 4-6, globosis, parvis ($1\frac{1}{4}$ mm.), collibus convergentibus, ostiolis minutis papilliformibus disco tuberculiformi erumpentibus; ascis cylindraceis, paraphysatis; sporidiis monostichis, oblongis, brunneis, continuis, 7-10 \approx 4-5.

Hab. in trunco acerino, Lyndonville N. Y. Amer. bor.

2. *Anthostoma argentinense* Spegazz., An. Mus. Nac. Buenos Aires 4592 t. XIX (1909) p. 341, — Peritheciis subglobosis majusculis, 1-1,5 mm. diam. plus minusve matrici extus cinerescenti infossis; ascis cylindraceis breviuscule pedicellatis, paraphysatis, octosporis, p. sp. 180-200 \approx 15-20; sporidiis ellipsoideo-navicularibus submajusculis opace fuligineis, primum pallidis, 2-guttulatis, 25-32 \approx 12-14.

Hab. ad ramos decorticatos *Prosopidum* prope Alto Grande, San Luis Rep. Argentina. Amer. austr. — *Anth. gallico* Sacc. et Flag. affinis.

3. *Anthostoma pulchellum* Schulzer ap. Hazsl. Sphær. Hung. p. 231, 4593 t. XV, f. 58. — Stromatibus e basi planâ conoideis, cortice pustulatim elevato tectis, dein erumpentibus; peritheciis 15-20 circinantibus globulosis, stromate immersis, in colla duplo triplove longiora, filiformia, convergentia attenuatis, disco minuto; ascis tereti-clavatis, apice rotundatis breviter tenuato-stipitatis, octosporis; sporidiis oblique monostichis, ellipsoideis v. ovoideis, minutis 5-8 \approx 2-3, brunneis, 1-2-guttulatis.

Hab. in ramis *Pruni Cerasi*, Vinkovce Hungariæ (SCHULZER).

4. *Anthostoma tripunctatum* (Bon.) Sacc. et Trav. — Syll. XIX, 4594 p. 75 — *Ascospora tripunctata* Bonord. Handb. Myk. p. 63, t. III, f. 71. — Peritheciis ligno omnino immersis et illud nigrificantibus, globosis, ostiolo non exerto erumpentibus; ascis anguste clavatis, deorsum tenuato-stipitatis, apice rotundatis, stipite crassiusculo; paraphysibus filiformibus; sporidiis oblique monostichis, tereti-ellipsoideis utrinque obtuse rotundatis, rectis, triguttatis, impellucidis, demum cirrose expulsis.

Hab. in ligno putrescente in Germania. — Diagnosis ex icone deprompta.

5. *Anthostoma Cocoes* v. Höhnelt, Fragm. z. Mykol. Sitzb. k. Ak. d. 4595 Wiss. Wien Bd. CXVI, Abt. I (1907) pag. 124. — Stromatibus immersis, tenuibus, effusis, nigris, elongatis, nitidis, magnitudine variabilibus, sæpe confluentibus, superficie levi; peritheciis depressis laxiusculis sæpe lineariter dispositis, 300 μ . circ. diam., ostiolis non prominentibus; contextu perithecii crasso, carbonaceo; paraphysibus numerosis, filiformibus, guttulato-faretis, mucosis; ascis

cylindræis, octosporis, $80-90 \approx 3,5-4$; sporidiis monostichis, violaceo-brunneis, unilocularibus, elongato-ellipsoideis, sæpe lateraliter depressis, utrinque angustatis, obtusulis v. acutatis, $7-10 \approx 2,5-3$.

Hab. in petiõlis siccis foliorum Cocoës nuciferæ, Malife Sãmõa (RECHINGER). — *A. versicoloris* Starb. affine.

6. *Anthostoma chusqueicola* Speg., Fungi Chilenses (1910) pag. 44, 4596 cum icon. — Maculis nullis; peritheciis laxè gregariis globosis ligno immersis, membranaceis $250-350 \mu$. diam.; ascis cylindræis breviter pedicellatis paraphysibus filiformibus commixtis, $250-300 \approx 10-12$; sporidiis navicularibus mediocribus, fuligineis, primo tunica mucosa hyalina tenui sæpe parum perspicua vestitis dein nudis $26-30 \approx 9-10$.

Hab. in culmis putrescentibus Cusqueæ Cumingii, Cerro Alegre de Valparaiso, Chile Amer. austr.

LOPADOSTOMA (Nke., 1867) Traverso, Fl. ital. crypt. II, fasc. I (1906) p. 169, *Fuckelia* (Nits. in Fuck 1869) (Etym. *lopas* velum et *stoma* ostiolum). — A gen. *Anthostoma* differt peritheciis in stromata discreta, suborbicularia initio peridermio velata (valsea nec eutypea) conjunctis; cetera eadem. — Huc duendæ sunt species: *Lopadostoma gastrinum* (Fr.) Trav. l. c. (*Anthostoma gastrinum* (Fr.) Sacc. — Syll. I, p. 303). — *Lop. Massaræ* (De Not.) Trav. l. c. (*Anthostoma Massaræ* (De Not.) Sacc. — Syll. I, p. 306). — *Lop. turgidum* (Pers.) Trav. l. c. (*Anthostoma turgidum* (Pers.) Nke — Syll. I, p. 303). — *Lop. tæniosporum* (Sacc.) Trav. l. c. (*Anthostoma tæniosporum* Sacc. — Syll. I, p. 304).

1. *Lopadostoma juglandinum* (Rehm) Sacc. et Trott. — *Anthostoma* 4597 (*Lopadostoma*) *juglandinum* Rehm, Ann. Mycol. VII (1909) p. 531. — Stromatibus cortice extus denigrato intus albo, linea nigra circumscripto arcte gregarie innatis, in rimis cortici lineariter usque 2 cm. longe et 2 mm. late expansis, præterea ellipticis v. lenticulariter orbicularibus, 1-2 mm. diam., atris, peridermio adhærente cinetis, papillulis semiglobosis poro pertusis coronatis; peritheciis globosis 5-12 arcte congregatis, 0,5 mm. diam. monostichis; ascis cylindræis c. $130 \approx 6-7$, parte sporif. $70 \approx 5$, octosporis; sporidiis oblongis, utrinque rotundatis, rectis v. subcurvatis, unicellularibus, utrinque 1(-3)-guttatis, fuscidulis, $8-10 \approx 3-3,5$, monostichis; paraphysibus filiformibus.

Hab. ad corticem Juglandis, Port Byrera Illinois Amer. bor. (E. T. et S. A. HARPER). — *Anth. turgido* proximum. —

- var. *Caryæ* Rehm, l. c. p. 532. — Stromatibus parallele confluentibus, emergentibus, a peridermio marginatis, utrinque obtusis, nigris, pulverulentis, usque ad 4 cm. longis et 3 mm. latis, ostiolis haud perspicuis, usque ad 2 mm. altis; ceterum ut in *A. juglandino*. — Ad corticem *Caryæ* albæ, River Forrest Ill., Amer. bor. (E. T. et S. A. HARPER).
2. *Lopadostoma turgidum* (Pers.) *Anthostoma turgidum* (Pers.) Nits. 4598 — Syll. I, pag. 303 — var. *minus* Sacc., Annal. Mycol. VI (1908). — A typo differt quia omnibus partibus minus ostiolisque brevioribus, paucioribus; ascis 84-90 \times 6,5-7; sporidiis ellipsoideis, 8-9 \times 4,5-5, æque 2-guttatis, fuligineis.
- Hab.* in cortice, ut videtur, *Quercus* vel *Castaneæ* prope Parisios Galliæ. (P. HARIOT).
3. *Lopadostoma dubium* (Feltg.) Sacc. et Trott., *Anthostoma dubium* 4599 Feltg. Vorstud. Pilz. Luxemb. I (1899) p. 179, II (1901) p. 111. Peritheciis plerumque valsoideo-aggregatis, rarius subsparsis, nigris, peridermio tumidulo sed immutato tectis, globosis ostiolis conoideis vix emergentibus; ascis cylindricis 75-85 \times 6-7, filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, leniter inæquilateris, continuis, 12-15 \times 4-6, brunneis, sæpe 2-guttulatis.
- Hab.* in ramis corticatis *Coryli* *Avellanæ*, Bartringen Luxemburgiæ. — Ex auctore ipso potius ad subg. *Lopadostoma* ducenda species.

Sect. 4. Hyalodidymæ.

MELANCONIS Tub. — Syll. I p. 602, IX p. 700, XIV p. 543, XVI p. 492, XVII p. 667.

1. *Melanconis perniciosa* Briosi et Farneti, Atti R. Ist. bot. Pavia 4600 ser. II, v. XIII (1909) et v. XIV pag. 50, Riv. Patol. Veget. III (1909) p. 341. — Pseudostromatibus sparsis, majusculis, peridermio pustulato tectis, deinde erumpentibus; peritheciis aggregatis, irregulariter sparsis v. subcircinantibus, majusculis, ovatis, in colla convergentia attenuatis; ascis cylindraceis, stipitatis, 150-160 μ . longis; paraphysibus filiformibus, ascos longe superantibus; sporidiis octonis, monostichis, raro distichis, elliptico-oblongis, hyalinis, medio didymis, parum constrictis, utrinque obtusiusculis, 35-38 \times 15-18.

Hab. in cortice *Castaneæ* parasitica, morbum «Moria dei

- Castagni» v. «Male dell' inchiostro» provocans in Etruria, Liguria, Pedemontio Italiæ. — Status conidicus: *Coryneum perniciosum* Br. et Farn.; st. pycnidicus: *Fusicoccum perniciosum* Br. et Farn. — Cfr. de hac specie ejusque formis observationes coll. Griffon et Maublanc in Bull. Soc. Myc. France, XXV (1910).
2. *Melanconis Alni* Tul. — Syll. I, pag. 604 — var. *manca* Rehm, 4601
Ann. Mycol. IX (1906) pag. 479. — A typo differt appendiculis sporarum non conspicuis.
Hab. in ramis *Alni* glutinosæ, Winterberg in Erzgebirge (WINTER), *Alni* viridis prope Kühtai, Oetz Tyrolia (REHM).
3. *Melanconis Ribis* (P. Henn. et Plötn.) Sacc. et Trott., *Mel. ribin-* 4602
cola Rehm, Ann. Mycol. IV (1905) p. 479. — Ita vocanda est *Ceriospora Ribis* P. Henn. et Plötn. — Syll. XVI, p. 534.
Hab. in ramis emortuis *Ribis* nigri, Wilmersdorfer Wiesen prope Berolinum Germaniæ (SYDOW).
4. *Melanconis helvetica* Rehm, Ann. Mycol. IV (1906) pag. 479. — 4603
Descriptio nulla.
Hab. in ramis emortuis *Salicis* sp., Gotthard-Pass Helvetiæ (REHM).

CHOROSTATE (Sacc.) Trav., Fl. it. Crypt. II (1906) fasc. I, p. 190.

Chorostate Sacc. (ut subgenus *Diaporthes*) — Syll. I, p. 607, XI p. 702, XVI p. 492.

1. *Chorostate atropuncta* (Peck) Sacc. et Trott., *Diaporthe atropuncta* 4604
Peck, N. Y. St. Mus. Bull. 131 (1909) p. 20. — Peritheciis subvalseis, 3-6 in cæspite v. sparsis, minutis, subglobosis, in cortice nidulantibus, nigris, linea nigra nulla limitatis, ostiolis brevibus, glabris, nigris, epidermide leniter elevata rupta circumdatis; ascis oblongis v. subcylindraceis, 100-120 × 10-12; sporidiis subdistichis, uniseptatis, hyalinis, 25-35 × 7-8.
Hab. in cortice *Tiliæ* americanæ, Alcove Albany co. Am. bor. (C. L. SHEAR).
2. *Chorostate sorbicola* (Bref.) Sacc. et Trott., *Diaporthe sorbicola* 4605
Brefeld Unters. Mykol. X (1891) pag. 236, t. VIII, f. 10-11. — Stromatibus valseis, conicis, peridermio tumidulo tectis; peritheciis in quoque stromate copiosis, stipatis, ostiolo nigro erumpentibus; ascis oblongis 100-115 × 12; sporidiis ellipsoideo-oblongis, utrinque rotundatis, bicellularibus, 4-guttatis medio leviter constrictis, distichis, hyalinis, 23-25 × 6,5-7,5.

Hab. in ramulis Sorbi Aucupariæ in Germania (FUCKEL sub *Valsa sorbicola* partim, in herb. NITSCHKE). — Forte eadem species est *D.* (Chor.) *Woroniniae* Jacz. quæ tamen posterior (1896).

3. *Chorostate Sydowiana* Sacc., Annal. Mycol. vol. VI (1908), *Diaporthe* (Chor.) *Sydowiana* Sacc. Herb. — Stromatibus laxè gregariis, subconicis, pustulatim erumpentibus 1 1/2 mm. diam.; peritheciis in quoque stromate paucis (7-10) sæpius circinantibus, globulosis, intus atro-griseis, ostioliis globulosis, parum emergentibus nigris et discum minutum fere totum occupantibus; ascis elongato-fusoideis, basi acutatis subsessilibus, apice rotundatis lumineque bifoveolatis, 115-125 × 16-17, aparaphysatis, octosporis; sporidiis distichis tereti-oblongis, utrinque rotundatis, 28-30 × 8,3-9, medio 1-septatis, binucleatis, hyalinis.

Hab. in ramis morientibus Sorbi aucupariæ, Birgsau pr. Oberstdorf Baviaræ, Julio 1906 (P. SYDOW).

4. *Chorostate Ailanti* (Sacc.) Træv., *Diaporthe Ailanthi* Sacc. — Syll. I, p. 621 — var. *megaceraphora* Fairm., Proc. Rochest. Ac. of Sc. IV (1906) p. 220. — Ostioliis emergentibus, valde elongatis.

Hab. in ramis *Ailanti*, Lyndonville, Amer. bor.

5. *Chorostate Lithrææ* (Speg.) Sacc. et Trott., *Diaporthe Lithrææ* Speg., Fungi Chilenses (1910) p. 62, cum icone p. 200. — Peritheciis cortice innatis, eximie valsoideo-gregariis, globosis parvis membranaceis, ostioliis cylindraceis, carbonaceis, conniventibus coronatis, 200-250 µ. diam.; ascis subfusoideis aparaphysatis, mox liberis, octosporis, 70-75 × 10-12; sporidiis subcylindraceis 1-septato-constrictulis, loculis æquilongis biguttulatis, hyalinis mediocribus, 17-18 × 4-5.

Hab. in ramis emortuis *Lithrææ causticæ*, Parque de Lota, Chile Amer. austr.

6. *Chorostate salicella* (Fr.) Sacc. — Syll. I, p. 622 (*Diaporthe*) — f. *Populi-tremulæ* Feltg., Vorst. Pilz. Fl. Luxemb. IV (1905) p. 86 (*Gnomonia*). — A typo differt ascis sporidiisque minoribus; ascis 46-55 × 8-10, sporidiis 15-17 × 3,5-4.

Hab. ad apicem ramulorum *Populi tremulæ*, Heinrichshof Luxemburgia.

7. *Chorostate ostryigena* (Ell. et Dearn.) Sacc. et Trott., *Diaporthe ostryigena* Ell. et Dearn., Fungi Columb. (1905) n. 2019. — Stromatibus cortice interiore v. ligno innatis, subseriatim dispositis, lineæ stromatica nigra profunda endoxyla circumscriptis; peritheciis circinatis v. subcircinatis ligno adnatis v. innatis, globoso-conoi-

deis, basi 0,5-0,5 mm. diam.; ostiolis rimose erumpentibus, minute papillatis, 1,4-5 mm. longis; ascis oblongo-fusoideis, octosporis, 40-48 \times 6-8; sporidiis biseriatis, oblongo-cylindraceis, tenuiter nucleatis, 13 \times 3.

Hab. in ramis emortuis *Ostryæ virginianæ*, London, Ontario, Canada (J. DEARNESS).

8. *Chorostate Vogliniana* Sacc. et Trott., *Diaporthe affinis* Voglino, 4611 Annal. R. Accad. Agric. Torino, LIII, 1910 (1911) p. 341, non *Diap.* (*Chorostate*) *affinis* Sacc. — Pseudostromatibus numerosis, non gregariis, ambitu circulari v. elliptico, applanatis, 1-1,5 mm. latis, peridermio diu tectis, dein erumpentibus; peritheciis in quoque acervulo plerumque 6-8 circinantibus, globosis v. ovatis 200-400 μ . latis, ostiolis convergentibus, brevibus, non exertis; ascis cylindraceis basi breviter attenuato-subpedicellatis, aparaphysatis, 90-120 \times 10-12, octosporis; sporidiis subdistichis oblongo-fusoideis, constricto-biseptatis, 22-24 \times 5, utrinque obtusis, rectis v. curvulis, 4-guttulatis, hyalinis.

Hab. in ramis corticatis *Populi canadensis*, Santena Italia bor. — Status pycnidicus: sporulis ellipsoideis v. ovoideis, hyalinis 3 \times 1,5 v. 5-6 \times 1,5. — Ob sporidia 2-septata a typo generis deflectit.

9. *Chorostate libera* (v. Höhn.) Sacc. et Trott., *Diaporthe libera* v. 4612 Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 340. — Stromatibus sparsis, noduloso-depressis, nigris, primum immersis dein cortice disrupta supra liberis; peritheciis irregulariter rotundatis 450-500 μ . cr., collo destitutis sed ostiolo verruciformi præditis, 3-5 in quoque stromate; ascis clavato-fusoideis, sessilibus, tenuiter tunicatis, octosporis, 45-50 \times 6-7, aparaphysatis; sporidiis distichis, fusoideis, apice obtusulis, appendicibus destitutis, quadriocularibus, cuboideo-quadriguttulatis, 9-12 \times 2-3.

Hab. in ramo cujusdam putri Tjibodas in ins. Java.

DIAPORTHE Nits. — Syll. I p. 606, IX p. 702, XI p. 307, XIV p. 543, XVI p. 492, XVII p. 667 (excl. sect. *Chorostate*).

I. *Euporthe*.

1. *Diaporthe Kriegeriana* Rehm, Ann. Mycol. VI (1908) pag. 321. — 4613 Stromate late effuso, ramulos ambiente, peridermio relaxato ostiolis perforato tecto, cortice haud decolorato, ligno intus nigro limitato;

peritheciis primitus tectis, globulosis, ca. 0,2 mm. diam., raro sparsis, plerumque 2-5 arcte congregatis, ligno supremo innatis, in collum elongatis, ostiolis e basi conica cylindraceutis, rectis, ca. 0,5 mm. longe prominentibus; ascis fusoides, 50-55 \times 9, octosporis; sporidiis fusiformibus, medio septatis, vix constrictis, rectis, utraque cellula 1-2-guttata, 12-14 \times 4, hyalinis, distichis; paraphysibus filiformibus.

Hab. ad ramulos siccos *Æsculi Hippocastani* prope Kő-nigstein a. Elbe Germania (KREGER).

2. *Diaporthe zizyphina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4614 (1907) p. 366. — Peritheciis matrice leniter infuscata infossis, eximie rostellato-ostiolatis, globulosis 200-250 μ . diam., ostiolo 0,5-2 mm. longo; ascis e fusoides clavulatis mox deciduis, paraphysatis octosporis 45-50 \times 9-10; sporidiis distichis ellipsoideo-elongatis 13-15 \times 4-5, medio 1-septatis leniter constrictis, hyalinis, loculis 2-guttulatis infero sæpius leniter minore.

Hab. ad pedunculo fructuum *Zizyphi vulgaris* in hortis San Miguel, Buenos Aires Rep. Argentina Amer. austr.

3. *Diaporthe fasciculata* Nits. — Syll. I, pag. 639 — var. *Meliloti* 4615 Sacc. Fung. ital. fig. 1253. — Peritheciis ligno immersis, peridermio atrato tectis, ostiolis cylindraceutis emergentibus, peritheciis diametrum æquantibus; ascis fusoides, typicis 50-54 \times 8-10, octosporis; sporidiis distichis fusoides utrinque rotundatis vel obtusulis, medio constricto-1-septatis, 12-15 \times 3,5-4, rectis, 4-guttatis, hyalinis.

Hab. in caulibus emortuis *Meliloti officinalis*, Montello, Italia super.

4. *Diaporthe Corallodendri* Speg., An. Mus. Nac. Buenos Aires t. XIX 4616 (1909) p. 362. — Peritheciis ligno denudato v. corticato sordide infuscato immersis, vix ostiolato-papillatis 120-130 μ . diam.; ascis e fusoides subclavatis, mox deciduis, octosporis paraphysatis, 55-60 \times 7-8; sporidiis distichis subfusoides, 14-15 \times 3,5-4, medio uni-septatis non v. leniter constrictis, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. ad ramos aridos *Corallodendri* (*Erythrinæ*) cristæ-galli prope La Plata Rep. Argentina America austr.

5. *Diaporthe Baptisæ* Rehm, Ann. Mycol. VI (1908) pag. 353. — 4617 Pseudostromate late expanso, ramulos ambiente, nigro, cum cortice coalito ejusque superficiem tandem nigrificante, primitus peridermio tecto, dein denudato et ligni superficiem atrificante, intus dilutissime nigro-limitato; peritheciis globosis, sparsis, ligni strato

supremo immersis, ca. 0,15 mm. ostiolis prorumpentibus, cylindraceis, tenuissimis, rectis, ca. 0,5 mm. longis; ascis fusoideis, 40-45 \approx 6-9, plerumque 4-sporis; sporidiis ellipsoideo-fusiformibus, medio septatis et subconstrictis, utraque cellula biguttata, rectis, hyalinis, 10-12 \approx 3,5, distichis; paraphysibus filiformibus, septatis, ca. 3 μ . crassis.

Hab. ad caules *Baptisæ tinctoriæ*, Newfield N. Jersey Amer. bor. (ELLIS). — Affinis *Diaporthæ Arcticæ*.

6. *Diaporthe Sphæralcæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4618 (1909) p. 365. — Peritheciis ligno infuscato v. corticato immersis sparsis v. rostellato-ostiolatis, subglobosis 150 μ . diam.; ascis e clavulato subfusoideis, 60 \approx 8-10, deciduis, octosporis aparaphysatis; sporidiis distichis ellipsoideis 16 \approx 5, medio 1-septatis non v. vix constrictis, hyalinis, loculis minute 2-guttulatis, infero sæpius nonnihil minora.

Hab. ad ramulos aridos *Sphæralcæ patagonicæ* in horto La Plata Rep. Argentina Amer. austr.

7. *Diaporthe Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4619 (1908) p. 122. — Peritheciis ramulos adhuc epidermide vestitos, dense minuteque pustulosos reddentibus, ligno immersis 150 μ . diam. sublongiuscule ostiolatis; ascis mox diffluentibus 35-40 \approx 8, octosporis, aparaphysatis; sporidiis oblique distichis e cylindraceo ellipsoideis medio uniseptatis, leniter constrictis, utrinque obtusis, grosse 4-guttulatis, hyalinis, 10-11 \approx 3-4.

Hab. ad ramos dejectos subputrescentes *Ilicis paraguayensis* in dumetis Rep. Argentina Amer. austr.

8. *Diaporthe glandulosa* Rehm, Ann. Mycol. VI (1908) p. 321. — 4620 Stromate in ligno decorticato late effuso, idque tenuiter fusco-nigrificante, intus nigro-limitato, tenuissimo; peritheciis plus minusve seriatis, globosis, ligno innatis, 0,5 mm. diam., sparsis, solitariis, ostiolo globuloso nigro subprominente; ascis ellipsoideis, tenerrimis, usque ad 45 \approx 8-9, octosporis; sporidiis oblongis, utrinque rotundatis, rectis, medio septatis, haud constrictis, utraque cellula 1-2-guttata, 12 \approx 3,5, hyalinis, distichis; paraphysibus filiformibus.

Hab. ad ramos putrescentes *Ailanti glandulosæ* prope Nossen Saxonie (KRIEGER). — A *Diaporthe discutiente* omnino diversa et ob paraphyses anceps.

9. *Diaporthe Gilliesiana* Speg., Fungi Chilenses (1910) p. 63. — Pe- 4621 ritheciis ligno cortice vestito immersis, globosis, parvis, ostiolo cy-

lindraceo carbonaceo corticem perforante, sed non exerto, armatis, 150-180 μ . diam.; ascis lanceolatis fluxilibus, octosporis, 50 \times 8; sporidiis distichis, cylindraceo-subbiconoideis parvis hyalinis, ad septum medium non v. vix constrictis, 14-15 \times 3,5-4.

Hab. in ramis emortuis *Lithrææ causticæ* in silvis prope Cerro Caracol de Concepcion, Chile Amer. austr.

10. *Diaporthe Heveæ* Petch, Ann. Roy. Bot. Gard. Peradenya III, 4622 Pt. I (1906) p. 3. — Peritheciis discretis, nigris 0,5-1 mm. diam., circinantibus, in ligno nidulantibus, in collum circa 1 mm. diam., 0,5 mm. long., parum e cortice emergens, attenuatis; ascis anguste ovatis, octosporis 40-45 \times 6-8; sporidiis oblique monostichis, hyalinis, fuscoideis, uniseptatis, 10-13 \times 4.

Hab. in ramis *Heveæ brasiliensis*, Ceylon.

11. *Diaporthe Menispermii* Speg., An. Mus. Nac. Auenos Aires t. XIX 4623 (1909) p. 363. — Peritheciis ligno immersis, ostiolo rostellato corticem perforante non v. vix exerto armatis, globosis 180-200 μ . diam.; ascis subfuscoideis deciduis octosporis, aparaphysatis, 50-55 \times 7; sporidiis elongato-ellipsoideis non v. vix inæquilateralibus, medio 1-septato-constrictulis, 14-15 \times 4-4,5, grosse 4-guttulatis hyalinis, oculis subæqualibus.

Hab. vulgata ad ramulos aridos *Menispermii laurifolii* in hortis, La Plata Rep. Argentina Amer. austr.

12. *Diaporthe Elæagni* Rehm — Syll. XIV, p. 546 — var. *americana* 4624 Fairm., Ann. Mycol. VIII (1910) p. 332. — Peritheciis immersis dein ostiolo prominentibus; ascis clavato-cylindraceis, utrinque attenuatis, 45-55 \times 6-7; sporidiis oblongo-fuscoideis; uniseptatis, septo constrictis, 4-nucleatis, hyalinis, 13-17 \times 3-4.

Hab. in ramis dejectis *Elæagni longipedis* culti, Lyndonville Amer. bor.

13. *Diaporthe Cestri* Speg., An. Mus. Nac. Buenos Aires t. XIX 4622 (1909) p. 361. — Peritheciis matrice corticata v. decorticata lateque infusata infossis, globulosis 90-120 μ . diam., ostiolo minuto rostellato armatis; ascis e fuscoideo subclavulatis, 55-60 \times 7-8, deciduis octosporis aparaphysatis; sporidiis distichis e cylindraceo-subfuscoideis 12-13 \times 3-4, medio 1-septatis non v. vix constrictis, grosse 4-guttulatis, oculis æqualibus.

Hab. ad ramos aridos putrescentes *Cestri Parqui* in sepius prope Villa Casilda Rep. Argentina America austr.

14. *Diaporthe Solani-verbascifolii* Speg., An. Mus. Nac. Buenos Aires 4626 t. XIX (1909) pag. 364. — Peritheciis ligno immersis, plagulas

intus subdealbatus extus nigrefuctos sæpius corticatus incolentibus, subglobosis 100-200 μ . diam., superne prominulis subrostellatis; ascis subfusoides deciduis octosporis aparaphysatis 40-60 \times 8-12; sporidiis ellipsoideis 14-16 \times 3-6, medio 1-septatis, grosse 4-guttulatis hyalinis, loculis æqualibus v. infero vix minore.

Hab. ad ramulos aridos Solani verbascifolii in hortis La Plata, Rep. Argentina Amer. austr.

15. *Diaporthe cornicola* Ell. et Ev. — Syll. XIV, pag. 546 — var. 4627
acuta Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 25. — Peritheciis minoribus, 200 μ . diam., ostiolis cylindraceutis, acutiusculis peridermium perforantibus, partibus internis minoribus a typo differt; ascis 38-40 \times 6,5-7,5; sporidiis 9-11,5 \times 3-4.

Hab. in ramis siccis Crotonis, Gran Chaco, Tatareda, Bolivia.

16. *Diaporthe Ricini* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4628 (1909) p. 364. — Peritheciis ligno extus nigrefacto intus subimmutato, omnino infossis, inermibus, globulosis, 100-150 μ . diam.; ascis subfusoides, cito deciduis subdiffluentibus, octosporis aparaphysatis 50 \times 8-9; sporidiis distichis ellipsoideo-subfusoides, medio 1-septatis leniter constrictulis, 14-15 \times 5, grosse 4-guttulatis, hyalinis, loculis æqualibus.

Hab. ad ramos emortuos subputrescentes Ricini communis in sepibus prope La Plata Rep. Argentina Amer. austr.

17. *Diaporthe asterisciina* Speg., Fungi Chilenses (1910) p. 63, cum 4629
 icone, p. 200. — Peritheciis ligno denudato extus nigrefacto immersis, globulosis, minutis, membranaceis, ostiolo carbonaceo parum exerto armatis, 90-110 μ . diam.; ascis subfusoides mox liberis aparaphysatis, 50 \times 10; sporidiis subcylindraceutis parvis, hyalinis 1-septato-constrictulis, 12-13 \times 4-4,5.

Hab. in pedunculis siccis Asteriscii (Dipterygiæ) chilensis, Cerro Caracol de Concepcion, Chile Amer. austr.

18. *Diaporthe aberrans* Speg., Fungi Chilenses (1910) p. 62. — Pe- 4630
 ritheciis ligno denudato non vel vix infusato omnino immersis, globosis minutis membranaceis, ostiolo carbonaceo vix exerto coronatis, 100-120 μ . diam.; ascis subcylindraceutis breviter crasseque pedicellatis, octosporis, 65-70 \times 10-12; sporidiis distichis subcylindraceutis subparvis ad medium 1-septato-constrictulis hyalinis, loculis æquilongis, biguttulatis, obtusis, 14-15 \times 4-5.

Hab. in pedunculis emortuis Lobeliæ salicifoliæ, Cerro

Alegre de Valparaiso, Chile, Amer. austr. — Forma ascorum a gen. *Diaporthe* recedit.

19. *Diaporthe microplaca* Sacc., in Ann. Mycol. X (1912) p. 316. — 4631
Stromatibus initio epidermide velatis, maculiformibus, nigris, acute limitatis, oblongis v. sublobatis, minutis, 3-4 mm. longis, lignum penetrantibus lineaque atra sæpe cinctis; peritheciis stromate innatis globulosis, exiguis, 250-300 μ . diam., ostiolis punctiformibus, nunquam emergentibus; ascis fusoides, apapophysatis, apice bifoveolatis, 30-35 \times 7, octosporis; sporidiis distichis, fusiformibus, obsolete 1-septatis, rectiusculis, 10-12 \times 3, hyalinis.

Hab. in peridermio lignoque supposito *Lonicera* semper-virentis in Horto Botanico patavino, 1897 (D. SACCARDO). — Species e subgenere *Euporthe*, cum *Diap. cryptica* nil commune habet.

20. *Diaporthe Tupæ* Speg., Fungi Chilenses (1910) p. 64. — Peri- 4632
theciis ligno denudato infossis, gregariis, clypeo stromatico determinato aterrimo tectis, globulosis, minutis, 90-100 μ . diam., breviter papillato-ostiolatis; ascis fluxilibus subfusoides, apapophysatis, octosporis, 50-55 \times 10-12; sporidiis biconoideis, hyalinis, parvis, constrictis, guttulatis, 12-14 \times 4.

Hab. in pedunculis siccis *Lobelia* Tupæ in silvis prope Ciudad de Valdivia, Chile Amer. austr.

21. *Diaporthe orthoceras* (Fr.) Nits. — Syll. I, p. 651 — var. *deci-* 4633
dua Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 26. — Stromatibus obsolete, linea nigra significatis, ellipticis vel oblongatis vel nonnumquam longe et angustissime seriatis, 1-nonnula perithecia includentibus; peritheciis cortice immersis, basi ligno insculptis, ostiolo cylindrico, interdum longiuscule exserto, sæpissime abrupte deciduo erumpentibus, c. 200 μ . diam., textura membranacea; ascis late fusiformibus v. clavatis, utrinque acutiusculis, 32-38 \times 6-7,5; sporidiis octonis, distichis vel conglobatis vel inferioribus monostichis, fusoides quadriguttulatis, deinde medio septatis, 8-10 \times 2,5-4; paraphysibus nullis.

Hab. in caulibus aridis lianæ *Compositarum spec. (liana)*, Gran Chaco, Tatarenda Bolivia. — A typo differt matrice non nigricata, peritheciis basi tantum ligno infossis, sporidiis minoribus.

22. *Diaporthe Xanthii* Speg., An. Mus. Nac. Buenos Aires t. XIX 4634
(1909) p. 366. — Matrice late atrata, peritheciis infossis densius-

scule gregariis, minutis vix rostellato-ostiolatis, 160-180 μ . diam. (sic); ascis fusoides mox deciduis aparaphysatis, octosporis, 50-60 \approx 8-9; sporidiis e fusideo subcylindræis utrinque acutiuscule subrotundatis 14-16 \approx 4, rectis v. lenissime subcurvulis, medio 1-septatis non v. vix constrictis, hyalinis, loculis æqualibus subgrosse biguttulatis.

Hab. ad caules aridos putrescentes *Xanthii spinosi* prope La Plata, Argentina Amer. austr.

23. *Diaporthe Tageteos* Speg., An. Mus. Nac. Buenos Aires t. XIX 4635.

(1909) p. 365. — Peritheciis hinc inde laxè gregariis, matrice sordide infuscata immersis vix rostellato-ostiolatis, globulosis 90-100 μ . diam.; ascis e fusideo clavulatis 50-55 \approx 7-9 mox deciduis, aparaphysatis, octosporis; sporidiis distichis e subcylindræo fusoides, 14-16 \approx 4, medio 1-septatis leniter constrictis hyalinis, loculis æqualibus grosse biguttulatis.

Hab. ad caules aridos putrescentes *Tageteos* minutæ in pratis circa Villa Casilda, Rep. Argentina Amer. austr.

24. *Diaporthe Centrophylli* Speg., An. Mus. Nac. Buenos Aires t. XIX 4636

(1909) p. 362. — Peritheciis ligno vestito v. denudato semperque infuscato infossis v. ostiolato-papillatis, globulosis, 150-180 μ . diam.; ascis subfusoides deciduis octosporis, aparaphysatis, 50-60 \approx 8-10; sporidiis distichis e cylindræo fusoides rectis v. leniter inæquilateralibus 15-16 \approx 3,5-4, medio 1-septatis non v. vix constrictis, grosse 4-guttulatis hyalinis, loculis æqualibus.

Hab. ad basim caulium *Centrophylli lanati* in arvis circa La Plata Rep. Argentina America austr.

25. *Diaporthe Amaranti* Speg., An. Mus. Nac. Buenos Aires t. XIX 4637

(1909) p. 360. — Matrice hinc inde extus late sordideque infuscata; peritheciis in maculis gregariis, relaxatis v. confertis, matrice infossis, globulosis, 120-150 μ . diam., sursum prominulis atque ostiolo carbonaceo sæpius breviusculo armatis; ascis fusoides 45-50 \approx 8, aparaphysatis, octosporis; sporidiis distichis ellipsoideis medio 1-septato-constrictis, loculis subæqualibus, hyalinis grosse biguttulatis, 10-12 \approx 4.

Hab. ad caules putrescentes *Amaranti chlorostachydis* in arvis Villa Casilda Rep. Argentina Amer. austr.

26. *Diaporthe catamarcensis* Spegazz., An. Mus. Nac. Buenos Aires 4638

t. XIX (1909) pag. 361. — Peritheciis ligno corticato immersis, ostiolo longiusculo exerto ornatis, globosis 120-150 μ . diam.; ascis fusoides, mox deciduis, aparaphysatis, octosporis 40-45 \approx 7-8; spori-

diis distichis ellipsoideo-fusoideis, 12-15 \times 3-4, medio 1-septato-constrictis grosse 4-guttulatis, hyalinis, loculis æqualibus.

Hab. ad ramulos aridos Salicis chilensis var. pyramidalis in Catamarca Rep. Argentina Amer. austr.

27. *Diaporthe Macluræ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4639

(1909) p. 362. — Peritheciis ligno insculptis sed superne cortice obtegente adnatis, minute papillato-ostiolatis, globulosis, 120-150 μ . diam.; ascis e fusoideo subclavulatis, deciduis, octosporis aparaphysatis, 50-60 \times 7-10; sporidiis distichis, ellipsoideis, medio 1-septatis plus minusve constrictis, 12-16 \times 4-6, grosse 4-guttulatis, hyalinis, loculis subæqualibus.

Hab. ad ramos putrescentes Macluræ aurantiacæ in sepiibus prov. Buenos Aires, Rep. Argentina Amer. austr.

28. *Diaporthe Casuarinæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4640

(1909) p. 361. — Peritheciis ligno extus infuscato intus pallescente sparse immersis, globulosis 100-120 μ . diam.; ascis e fusoideo subclavulatis 50-60 \times 10-22 cito deciduis, aparaphysatis octosporis 50-60 \times 10-12; sporidiis ellipsoideis, 12 \times 6, medio 1-septato-constrictis, loculis subæqualibus grosse 1-2-guttulatis hyalinis.

Hab. ad ramulos emortuos aridos Casuarinæ strictæ in horto Claypole, Buenos Aires Rep. Argentina Amer. austr.

29. *Diaporthe chamæropina* L. Gaja, Fl. micol. prov. Padova, p. 19 4641

(sunto lit.). — Stromate linea nigricante limitato; peritheciis solitariis, raro proximatis, immersis, subglobosis, atris, 220-240 μ . latis, collo oblongo cylindraceo obtuso et inæquali erumpentibus, ascis cylindraceis-fusoideis, octosporis, aparaphysatis, 62-66 \times 6-8; sporidiis uniseptatis, hyalinis, medio constrictis, 4-guttulatis, oblique inonostichis, sæpe ad apicem acutiusculis, 12-14 \times 5-6.

Hab. in petiolis Chamæropis humilis in Viridario Condictus Universitariorum « Francesco Petrarca » Patavii Ital. bor. — Affinis est *Diaporthe Phœnicis*, a qua differt substrato, collo peritheciolorum longiore, sporidiis crassioribus, et medio constrictis.

30. *Diaporthe Musæ* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4642

(1909) p. 363. — Matrice extus plus minusve late vageve infusca, intus immutata; peritheciis parenchymate petiolorum immersis, minutis globosis, majusculè rostellatis, quandoque inermibus, nigris, 150 μ . diam.; ascis e fusoideo subclavulatis, deciduis octosporis aparaphysatis, 40-58 \times 8-10; sporidiis distichis rectis vel lenissime inæquilateralibus, medio 1-septato-constrictis, 10-13 \times 5-6, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. ad petiolos putrescentes foliorum Musæ sapientum in hortis prope Oran Jujuy Amer. austr.

31. *Diaporthe ? Tillandsiæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4648 (1909) p. 365. — Peritheciis parenchymate infossis parvis, ostioliis rostellatis carbonaceis armatis, globulosis 200-226 μ . diam.; ascis cylindraceis non deciduis nec diffluentibus, aparaphysatis 180-200 \times 15-16; sporidiis monostichis, rectis, ellipsoideis, 20 \times 12, medio 1-septatis hyalinis, loculis æqualibus subglobosis eguttulatis.

Hab. ad folia arida putrescentia Tillandsiæ Duratii in hortis La Plata, Rep. Argentina Amer. austr. — Habitu externo typico sed ascis cylindraceis non caducis sporarumque loculis subglobosis eguttulatis desciscens.

32. *Diaporthe Sacchari* Speg., An. Mus. Nac. Buenos Aires t. XIX 4644 (1909) p. 364. — Matrice immutata v. vix vage pallideque infuscata; peritheciis lenticularibus hinc inde laxè gregariis insculptoprominulis brevissime rostellatis, 120-150 μ . diam.; ascis e fusoido subclavulatis, octosporis, aparaphysatis, 65-90 \times 14-18; sporidiis subfusoidis distichis sæpius leniter subcurvulis, 20-30 \times 5-7, medio 1-septatis non v. vix constrictis, loculis subæqualibus grosse 1-guttulatis hyalinis.

Hab. ad culmos crescentes Sacchari officinarum in campis prope Ledesma, Jujuy Rep. Argentina, Amer. austr.

II. *Tetrastaga*.

33. *Diaporthe Anonæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4645 (1909) p. 360. — Matrice immutata; peritheciis cortice dealbato omnino immersis e globoso depressis, membranaceis, olivaceis, 120-160, ostiolo vix papillato exertoque coronatis; ascis fusoides mox deciduis, aparaphysatis, octosporis, 45-50 \times 8; sporidiis distichis e cylindraceo subfusoides, 12-13 \times 3, medio 1-septatis, non vel vix constrictis, grosse 4-guttulatis, loculis æqualibus.

Hab. ad ramulos aridos Anonæ Cherimoliæ in hortis Tucuman Rep. Argentina Amer. austr.

34. *Diaporthe valparadisiensis* Speg., Fungi Chilenses (1910) p. 64. — 4646 Peritheciis hinc inde parce gregariis v. sparsis, cortice subimmutata immersis, subglobosis, minutis, vix papillato-ostioliatis 180-200 μ . diam.; ascis non fluxilibus e fusoido-subclavulatis, breviter pedicellatis, aparaphysatis, 70 \times 8, octosporis; sporidiis subcylindra-

ceis v. leniter subbiconoideis utrinque obtusis, medio 1-septato-constrictis hyalinis, 14-15 \times 4, grosse guttulatis.

Hab. in ramis siccis Lithrææ causticæ, Cerro Alegre de Valparaíso, Chile Amer. austr. — Ob structuram ascorum a genere parum recedit.

35. *Diaporthe Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4647 (1908) pag. 122. — Peritheciis cortice innatis epidermide velatis 150-200 μ . diam., sparsis v. laxe gregariis, albo-farctis, ostiolo minute carbonaceo coronatis; ascis fusoideo-clavulatis, paraphysatis, octosporis, 75-80 \times 15-20; sporidiis oblique distichis subbiconoideis, medio uni-septato-constrictis, 20-22 \times 7, loculis sæpius grosse 1-v. 2-guttulatis, hyalinis.

Hab. ad ramos aridos adhuc pendulos Ilicis paraguayensis, in silvis circo Campo das Cuias Rep. Argentina Amer. austr. *D. binoculata* (Ell.) Sacc. affinis, sporidiis duplo angustioribus distincta.

36. *Diaporthe Abutilonis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4648 (1909) p. 366. — Peritheciis cortice infuscato infossis, densiuscule gregariis, globosis 100-120 μ . diam. ostiolo non v. vix papillato, matricis superficiem attingente, coronatis; ascis e fusoideo subclavulatis citissime deciduis, 45-50 \times 7-8, octosporis, paraphysatis; sporidiis distichis e cylindraceo subfusoides, 12-14 \times 3-4, medio 1-septatis non v. lenissime constrictis hyalinis, loculis subæqualibus biguttulatis.

Hab. ad ramos aridos putrescentes *Abutilonis* sordidi in silva Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

37. *Diaporthe Nerii* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4649 (1909) p. 366. — Peritheciis matrice late nigrefacta infossis, globosis, 140-150 μ . diam., membranaceis vix papillulato-ostiolatis; ascis e fusoideo subclavulatis, 50-55 \times 8-10, cito secedentibus, octosporis, paraphysatis; sporidiis subelongato-ellipsoideis 14-15 \times 4-5, medio 1-septato-constrictis, hyalinis, loculis æqualibus biguttulatis.

Hab. ad ramulos emortuos putrescentes *Nerii* *Oleandri* in hortis La Plata Rep. Argentina Amer. austr.

38. *Diaporthe Polygoni* Rehm, Ann. Mycol. VI (1908) pag. 321. — 4650 Stromate late effuso, caulem ambiente, demum extus nigricante, intus linea nigra vix conspicua limitato; peritheciis dispersis, seriatis in cortice immutato nidulantibus eumque protrudentibus, globosis, 0,15 mm. diam., demum collabescentibus, ostiolo tenuis-

simo cylindraceo recto peridermium perforantibus et usque ad 0,5 mm. prominentibus; ascis ellipticis, $35-45 \times 9-10$, octosporis; sporidiis oblongis, obtusis, rectis, bicellularibus, medio constrictis, utraque cellula guttis 2 magnis oleosis repleta, demum 3-septatis, hyalinis, $7-10 \times 2,5-3$ distichis; paraphysibus nullis.

Hab. ad caules siccos Polygoni avicularis, Lichterfelde pr. Berolinum Germaniæ (SYDOW).

39. *Diaporthe immaculata* Rehm, in Jaap, Abh. bot. Ver. Prov. Bran- 4651
denb. LII (1910) p. 148. — Nomen nudum.

Hab. in caulibus vetustis Rumicis crispis prope Triglitz, Germania.

40. *Diaporthe prenanthicola* Atkins. in Rehm, Ann. Myc. VII (1909) 4652
p. 531. — Nomen nudum.

Hab. in ramis emortuis Prenanthidis, Altissima Cascatilla Ithaca Amer. bor. (G. F. ATKINSON).

PSEUDODIAPORTHE Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 358 (Etym. *pseudes* falsus et *Diaporthe*). — Perithecia matrice immersa, stromate genuino destituta. Asci pedicellati non decidui, paraphysati; sporidia didyma hyalina. — Genus ascis strato proligerio adnatis et paraphysatis a *Diaporthe* optime distinctum.

1. *Pseudodiaporthe Coffeæ* Speg., l. c. p. 358 cum icon. — Perithe- 4653
ciis corticolis v. lignicolis, globulosis, 200-300 μ diam., rostellato-ostiolatis, laxissime pauci-gregariis; ascis e fusideo clavulatis breviter pedicellatis, $110-150 \times 18-20$, paraphysibus filiformibus longioribus densiusculis obvallatis; sporidiis biconoideis di- v. tristichis, medio 1-septatis, leniter constrictis, loculis æqualibus grosse biguttulatis.

Hab. ad ramos emortuos Coffeæ arabicæ in hortis Orán, Jujuy Rep. Argentina, Amer. austr.

2. *Pseudodiaporthe major* Speg., An. Mus. Nac. Buenos Aires t. XIX 4654
(1909) p. 359. — Peritheciis 500-800 μ diam.; ascis e cylindraceo-subclavulatis, sæpius torulosis, $120-140 \times 20-24$; sporidiis elliptico-didymis, $30-34 \times 12-14$.

Hab. ad ramulos emortuos Coffeæ libericæ in hortis Orán, Jujuy, Rep. Argentina Amer. austr. — Species a precedente notis nonnullis vix recedens et facile ejusdem varietatem majorem sistens sed formæ intermediæ adhuc non inventæ.

STIGMATOPSIS Trav., Fl. ital. cryptog. II, fasc. I (1906) pag. 213 (Etym. a *stigma* et *opsis* facies, quia *Diatrypem Stigma* habitu omnino imitatur). — Stroma genuinum, effusum, erumpenti-superficiale, ligneo-carbonaceum, fragile, extus intusque nigricans. Perithecia monosticha, stromate immersa, globoso-ovoidea v. angulata, atra; asci clavato-oblongi, pedicellati, paraphysati, octospori; sporidia ellipsoideo-oblonga, 1-septata, hyalina v. dilute fuscidula, guttulata. — Est *Diatrype* sporidiis hyalo-didymis.

1. **Stigmatopsis Baccarinii** Trav., l. c. p. 214, fig. 39. — Stromate 4655 effuso, longe expanso, subcarbonaceo, nigricante, ostiolis prominulis punctulato; peritheciis immersis monostichis, stipatis, globoso-ovoideis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., mutua pressione sæpe angulatis, in collum brevissimum productis, nigris; ostiolis prominulis poro circulari v. eroso pertusis; ascis clavato-fusoideis, longiuscule pedicellatis, 75-100 \times 8-11 (p. sp. 55-70 μ . longa) paraphysibus filiformibus paucis obvallatis; sporidiis irregulariter distichis, initio suballantoideis, dein ellipsoideo-oblongis, rectis v. curvulis, 1-septatis, ad septum parum constrictis, quadriguttulatis, in asco luteo-fuscidulis, extus subhyalinis, 15-20 \times 5-6.

Hab. in ramis corticatis Fagi, Vallombrosa Etruriæ, Italia centr. (BACCARINI).

MYRMÆCIUM (Nits.) Sacc. — Syll. I p. 600, XIV p. 492, XVII p. 675.

1. **Myrmæcium Höhnelianum** (Rick) Sacc. et Trav. — Syll. XX p. 1275 4656 *Myrmæciella Höhneliana* Rick in Theissen Annal. Mycol. (1910) p. 456 c. fig. — Subepidermicum, erumpens; stromate flavo-rubello, ætate atro-sanguineo, suberoso, e cellulis polygonalibus membranaceis crassis formato; peritheciis stipatis, ellipsoideis vel subglobosis, raro solitariis, plerumque in pulvinulos globosos c. 1,2-1,5 \times 0,8-1 mm. aggregatis, partim stromate communi immersis, partim subliberis, vertice nudo vitreo-sanguineo, c. 420-500 \times 240-340, poro minuto, orbiculari, interdum e latere compresso lophiostomatæo pertusis; ascis sessilibus vel brevissime nodulose stipitatis, elongatis, 118-135 \times 20-25 v. brevioribus subventricosis, 95 \times 28-30, octosporis; sporidiis distichis, hyalinis, oblongis, leniter convexo-concavis, medio septatis, raro subconstrictis, irregulariter guttulatis, 35-44 \times 11-13; paraphysibus nullis.

Hab. in ramis Rubi sp. in Brasilia. — Species quoad sedem systematicam dubia.

2. *Myrmæcium Harperianum* Rehm, Ann. Mycol. VII (1909) p. 532. 4657

— Stromatibus in ramulo gregariis, lenticularibus, convexulis, innatis, singularibus, interdum binis confluentibus, extus cinereo-nigris v. atris, 3-4 mm. diam., lignum dealbatum linea tenui nigra, usque ad 5 mm. profunde et 1,5 cm. late ambientibus; peritheciis globosis 3-6 ligno monostiche innatis, 0,5 0,8 mm. diam., membranaceis, fusco-contextis, collis convergentibus, in superficie stromatis denigrati sæpe peridermii squamulis obtectis, papillulis conicis obtusis prominentibus; ascis cylindraceutis 120-136 × 10-12, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis et valde constrictis, hyalinis, 15-18 × 7-8, strato mucoso 2 µ. lato obductis, monostichis; paraphysibus filiformibus, septatis, 3 µ. cr., hyalinis.

Hab. ad ramum Corni, Summer Wash. Amer. bor. (ex Herb. E. T. et S. A. HARPER). — *M. endoleuco* affine sed distinctum.

ENDOTHIA Fr. — Syll. I p. 601, IX p. 700, XIV p. 550, XVII p. 675.

1. *Endothia gyrosa* (Schw.) Fr. — Syll. I, pag. 601 — Huc juxta 4658
exempl. originalia et observante quoque cl. von Höhnelt (Fragm. zur Mykol. IX (1909) p. 20) spectat *Diaporthe parasitica* Murr. (Torreya VI, pag. 189) seu *Valsonectria parasitica* Rehm (Ann. Mycol. (1907) p. 210), valde noxia Castaneis et vere parasitica in Amer. boreali et cujus st. pycnid. (frequentior) est *Endothiella gyrosa* Sacc. Cfr. Syll. XXII. De his fungillis cfr. observationes biologicas cl. Henr. Pantanelli (Rendic. R. Accad. Linc. 1911), qui tamen infauste habuit ut *Diaporthe parasitica*!

Sect. 5. Phæodidymæ.

VALSARIA De Not. et Ces. — Syll. I p. 741, IX p. 755, XI p. 318, XIV p. 560, XVI p. 509, XVII p. 691.

1. *Valsaria Milletiæ* (Racib.) Sacc. et Trott., *Myrmæcium Milletiæ* 4659
Raciborski, Bull. Ac. Sc. Cracovie (1909) pag. 391. — Maculis foliicolis rotundatis primum viridi-flavis dein flavis, 0,5-1 cm. latis; stromate immerso 50 µ. circ. cr. et 1-5 mm. lato; peritheciis in quoque stromate numerosis et epidermidem matricis verruciformi-elevantibus demum ostiolo papilliformi depresso brunneo-flavo ex ea erumpentibus; peritheciis subglobosis v. sublenticularibus, 100-

190 μ . altis, 200-260 μ . latis, papillis ostiolaribus stroma radiatim findentibus; ascis aparaphysatis, allantoideis, 33-44 \times 9-12, octosporis; sporidiis distichis, bilocularibus, levibus, ovoideis 7-9 \times 3-4, utrinque rotundatis non constrictis, nigro-brunneis.

Hab. in foliis *Milletiæ sericeæ*, *Diasinga* prope Buntenzorg in ins. Java.

2. *Valsaria acericola* Fairm., The Pyren. of Orleans County in Proc. 4660
Rochest. Acad. IV (1905) p. 189. — Stromate corticali, valsoideo, 2 mm. circ. diam.; peritheciis circinatis, parvis, 0,5 mm., cortice interiore infossis et linea nulla stromatica circumscriptis, ostioliis convergentibus et apice in discum nigrum minutum prominulum unitis et pustulas subconicas erumpentes epidermide cinctas efficientibus; ascis cylindraceutis, p. sp. 250 \times 15-18; paraphysibus?; sporidiis uniseriatis, oblongo-ellipsoideis, brunneis, uniseptatis, septo constrictis, apice rotundatis, 33-40 \times 15-18.

Hab. ad truncos *Aceris rubri*, Ridgeway, New York, Amer. bor. (FAIRMAN).

3. *Valsaria clavatasca* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4661
(1908) p. 123, cum icon. — Peritheciis sæpius laxè gregariis cortice innatis, epidermide arcte adnata vestitis, lenticularibus 400-750 μ . diam., carbonaceis, ostiolo vix papillulato ornatis; ascis constipatis clavulato-cylindraceutis aparaphysatis, cuneato-pedicellatis long. tot. 150 μ ., p. sp. 120 \times 28; sporidiis ellipsoideo-subbiconoideis, medio 1-septatis, non v. vix constrictis, primo tunica tenuissima mucosa hyalina vestitis dein nudis, levibus, fuligineis, 30-35 \times 14-15.

Hab. vulgata ad ramos emortuos corticatos *Ilicis paraguayensis* Rep. Argentina Amer. austr. — Potius *Phaeospermatis* sp.

4. *Valsaria Mata* Roll. Bull. Soc. Mycol. (1905) p. 24, t. I, f. 1. — 4662
Stromate valseo, nigro, corticali; peritheciis in quoque acervulo 8-10, globosis, stipatis, 0,3-0,5 mm. diam, collis in discum cruciatim impressum cuticula cinctum convergentibus; ascis cylindraceutis, breviter stipitatis, 150 \times 10 filiformi-paraphysatis, octosporis; sporidiis monostichis oblongatis, utrinque rotundatis, 1-septatis, medio constrictis, guttulatis, chlorinis dein pallide brunneis, demum atris, 20-24 \times 8-10.

Hab. in ligno *Pistaciæ Lentisci* (vulgo *Mata*) pr. Palma in insul. Balearibus. — Affinis *Vals. insitivæ*.

5. *Valsaria Spartii* Maubl. Bull. Soc. Mycol. (1905) pag. 88, tab. VI, 4663
f. 11. — *Euvalsaria*; stromatibus nigris, carbonaceis, erumpenti-

bus, verrucosis, 1-4 mm. latis; peritheciis inordinate immersis v. irregulariter circinantibus, difformibus, globulosive; ascis cylindricis, breviter stipitatis, 150-170 \approx 10-12, octosporis, paraphysibus filiformibus guttulatis, 2 μ . cr. obvallatis; sporidiis monostichis, primum lutescentibus guttatisque deiu fuliginis, 1-septatis, constrictis, sæpe inæquilateris, nunc utrinque rotundatis, nunc basi tenuatis, 18-22 \approx 8-10.

Hab. in ramis *Spartii juncei*, Pornic Loire inf. Galliae. — In stromate juniore occurrunt interdum pycnidia sporulis ovoideis, hyalinis 2,5 \approx 2, sporophoris acicularibus 20 μ . longis suffultis.

6. *Valsaria insitiva* Ces. et De Not. — Syll. I, p. 741. — f. *Acaciæ caveniæ* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 373. — Ascis cylindraceis 70-80 \approx 10, paraphysatis; sporidiis ellipsoideo-biconoideis 14-15 \approx 8 non v. vix constrictis. — f. *Cordiæ Gerascanthi* Speg., l. c. — Ascis cylindraceis 90-100 \approx 10, dense paraphysatis; sporidiis ex elliptico subovoideis 14-16 \approx 7-8, loculis subæqualibus v. infero sæpius vix minore. — f. *Mimosæ polycarpæ* Speg., l. c. — Ascis cylindraceis breviuscule pedicellatis, 120 \approx 10 modice paraphysatis; sporidiis ellipsoideis utrinque obtusissimis 14-15 \approx 7-10 non v. vix subcoarctatis.

Hab. vulgata ad ramos aridos putrescentesque matricum indicatorum, Argentina America austr.

7. *Valsaria Theissenii* Rehm, Ann. Mycol. VII (1909) pag. 537. — 4665
Stromatibus irregulariter orbicularibus, 0,5-1,5 cm. diam., 1 mm. cr., atris, cortici innatis, convexulis, ligno linea tenui nigra subtus percurso, glabris; peritheciis globulosis, haud papillulatis, poro pertusis, arcte congregatis, stromate innatis, 0,15 mm., diam., carbonaceis; ascis cylindraceis, apice rotundatis, octosporis 70 \approx 6; sporidiis ellipsoideis, utrinque subobtusis, medio septatis et aliquantulum constrictis, utraque cellula 1-guttata, fuscis, 9-10 \approx 4, monostichis; paraphysibus filiformibus, 1 μ . cr.

Hab. in ramo emortuo, Sao Leopoldo Rio Grando do Sul Brasiliæ (THEISSEN S. J.).

8. *Valsaria chilensis* Speg., Fungi Chilenses (1910) p. 68, cum icon. 4666
— Euvalsaria; stromatibus parum prominulis, ligno impositis, epidermide velatis, nigris, scrupulosis, confluyendo difformibus; peritheciis stromate constipatis, subglobosis, subcarbonaceis, vix papillato-ostiolatis, 150-200 μ . diam.; ascis cylindraceis non v. vix paraphysatis, breviter pedicellatis, 2-4-sporis, 75-80 \approx 9-10; spori-

diis recte monostichis subcylindræis submajusculis, medio 1-septato-constrictulis, intense fuligineis, 20-28 \times 7-8.

Hab. in culmis emortuis Chusqueæ Quila, Cerro Caracol de Concepcion, Chile Amer. austr.

9. *Valsaria* ? *donacicola* Speg., An. Mus. Nae. Buenos Aires t. XIX 4667 (1909) p. 372. — Stromatibus minutis linearibus, 1-50 mm. long., 250-400 μ . lat., innato-erumpentibus, carbonaceis, matricem plus minusve late sordideque nigrificantibus; peritheciis confertis, subglobosis 90-100 μ . diam., subcarbonaceis obsolete ostiolatis; ascis cylindræis breviter pedicellatis paraphysatis, octosporis, 70 \times 4; sporidiis recte monostichis ellipsoideis 8 \times 3,5 fuligineis, medio 1-septatis leniter constrictis, loculis subæqualibus v. infero nonnihil minore, non v. 1-guttulatis.

Hab. ad culmos dejectos putrescentes Arundinis Donacis in horto Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr. — *Vals. insitivæ* Ces. et De Not. simillima sed omnibus partibus duplo minoribus mox dignoscenda.

10. *Valsaria subtropica* Speg., An. Mus. Nac. Buenos Aires t. XIX 4668 (1909) p. 372. — Peritheciis cortice innato-erumpentibus, sparsis v. stromatice aggregatis, submolliusculis, atris, subglobosis, 150-200 μ . diam., ostiolo minute papillulato carbonaceo non vel vix prominulo coronatis; ascis clavulatis, longissime pedicellatis, modice paraphysatis, octosporis parte spor. 45-60 \times 10-12, pedicello filiformi 80-120 \times 1,5-2; sporidiis didymis elongato-ellipsoideis, rectis v. vix subnavicularibus, medio 1-septatis leniter constrictis, subopacis fuligineis, 14-16 \times 5-6, loculis æquilongis pergrosse biguttulatis.

Hab. ad culmos putrescentes Sacchari officinarum nec non ad caules aridos Chænocephali macrophylli, in campis prope Tucuman Rep. Argentina, Amer. austr.

PHÆOSPERMA (Sacc.) Traverso, Fl. ital. Crypt. II, fasc. I (1906) p. 292. — Huc ducendæ sunt sec. Cl. Traverso: *Valsaria anserina* Sacc., *V. cariei* Sacc., *V. Saccardiana* Speg.

1. *Phæosperma* ? *feniculinum* Spegazz., An. Mus. Nac. Buenos Aires 4669 t. XIX (1909) p. 371. — Peritheciis hinc inde matrice infusata infossis, ostiolo vix rostellato armatis, subglobosis 120-130 μ . diam., coriacellis; ascis cylindræis paraphysatis, octosporis, 125-150 \times 10; sporidiis didymis monostichis ellipsoideis 13-15 \times 8-9, medio 1-septatis, lenissime constrictulis, fuligineis, subæqualibus eguttulatis.

Hab. ad caules aridos putrescentesque Fœniculi piperiti Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

2. *Phæosperma valdiviense* Speg., Fungi Chilense (1910) p. 70, cum icon. — Stromate effuso superficiem matricis extus nigrificante, intus linea atra tenui, repando-sinuosa limitato; peritheciis stromate omnino infossis, laxe gregariis, globulosis, 500-750 μ . d., atris, ostiolo carbonaceo vix papillato exertulo, per ætatem deciduo atque stromata confertiuscule perforato-porosa relinquente, donatis; ascis linearibus dense paraphysatis modice pedicellatis, octosporis, 150-160 \times 9-10; sporidiis subcylindraceis v. subelliptico-biconoideis, 1-septato-constrictulis, fuligineis, mediocribus, 18-24 \times 7-8, guttulatis.

Hab. in culmis siccis Chusqueæ valdiviensis, Bahía de Corral, Chile Amer. austr.

3. *Phæosperma leptosporum* Speg., Fungi Chilenses (1910) pag. 69, cum icon. — Peritheciis ligno omnino immersis, globosis minutis submembranaceis, 300-350 μ . diam., ostiolo brevi crassoque superficiem matricis attingente sed non exerto, coronatis; ascis linearibus octosporis, parce paraphysatis, 200 \times 10; sporidiis subrectis monostichis, cylindraceo-subfusoides, non v. lenissime subnavicularibus, medio 1-septatis non constrictis, loculis biguttulatis, fumoso-fuligineis, 25-30 \times 5-6.

Hab. in culmis emortuis Chusqueæ Cumingii, Cerro Alegre de Valparaíso, Chile Amer. austr.

ENDOXYLINA Romell — Syll. XI p. 318, XVI p. 508.

1. *Endoxylina eutypoides* Starb., Ascom. Schwed. Chaco-Cordill. Ex- ped. Arkiv f. Bot. Bd. V (1905) pag. 28. — Stromate obsoleto, cortice nigrificato, forma vix mutato, longe lateque effuso; peritheciis gregariis, corticem protrudentibus, plane immersis, interdum intra matricem confluentibus, ostiolis magnis conoideis, non paullum dilatatis, interdum leniter stellatim sulcatis erumpentibus, 300-400 μ . diam., textura membranacea, dense prosenchymatica, nigra; ascis cylindraceis vel cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 107-127 \times 10-15,5; sporidiis octonis, recte, interdum imbricatis vel nonnullis oblique monostichis vel distichis, primo hyalinis quadriguttulatis, deinde medio septatis, constrictis, loculis conicis, utrinque obtusiusculis vel fere acutatis, fuligineis, 15-16 \times 6,5-7; paraphysibus filiformibus, hyalinis.

Hab. in ramulis aridis Crotonis etc., Tatarenda, Gran Chaco Boliviae.

Sect. 6. Hyalophragmiæ.

HOLSTIELLA P. Henn. — Syll. XIV p. 593.

1. *Holstiella bipindiensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4673 p. 127. — Stromatibus gregarie sparsis, erumpentibus, innato-superficialibus, angulato-pulvinatis, rugulosis, cinereo-fuscis intus citrinis dein atris, 1,5-2,5 mm. diam., ostioliis plurimis prominulis atris, dein annulato-depressis; peritheciis numerosis omnino immersis, ovoideis, atris; ascis elongato-clavatis, apice obtuse rotundatis, crasse tunicatis, basi pedicellatis, octosporis, 170-260 \times 20-28; paraphysibus filiformibus, ramosis, hyalinis; sporidiis subbi- v. subtristichis, longe fusoideis, crasse tunicatis, utrinque obtusiusculis, pluriseptatis (c. 12), constrictis, hyalinis, 40-50 \times 8-10.

Hab. in ramis corticatis, Bipindi Kamerun Africæ centralis (ZENKER). — *Hol. usambariensis* P. Henn. affinis sed differt stromatibus, ascis majoribus, sporidiis etc.

CALOSPORA Sacc. — Syll. II p. 231, IX p. 871, XI p. 341, XIV p. 593, XVII p. 717.

1. *Calospora Tamaricis* Maubl., Bull. Soc. Myc. France XXII (1906) 4674 p. 63, cum icon. — Stromatibus corticulis, gregariis, nigris, 1-2 mm. latis, superne applanatis verrucosisque, epidermide circumscissa circumdatis; peritheciis in quoque stromate 5-12, globulosis v. mutua pressione angulosis, 250-300 μ . diam., ostiolo brevi, leniter prominulo; ascis apice attenuato-obtusis, breviter pedicellatis, 100-115 \times 14-16; paraphysibus numerosis, filiformibus, simplicibus, ascos superantibus; sporidiis octonis, distichis, primum lanceolatis, infra medium constricto-septatis, demum utrinque obtusis, rectis v. leniter curvulis, loculo superiore latiore, 2 rarius 3-septato, inferiore 1-2-septato, ad septum primarium valde constrictis, ad altera septa leniter, granulosi, hyalinis, 24-28 \times 8-9.

Hab. in ramis emortuis Tamaricis, Pornic Gallie. — Var. *signoeloides* Patouill. l. c. pag. 63, cum icon. — A typo differt peritheciis solitariis, dense gregariis, superficialibus in ligno decorticato; ascis et sporidiis ut in typo. — In iisdem ramis cum typo.

2. *Calospora ? bahiensis* Spegazz., Micromicetas de los Cacaoyeros, 4675 Rev. Facult. Agronom. y Veter. t. II, La Plata (1906) nn. 4-6,

p. 306, fig. c. — *Stromatibus* cortice innatis tuberculoso-prominulis, subgloboso-depressis, gregariis sæpe seriatis non vel parce confluentibus 1,5-6 mm. long., 1,5-3 mm. lat., 0,75-1 mm. cr. nigricantibus glabris, margine rotundatis superne convexulis ostioliis perithecorum non v. vix prominulis nigris, areola candida indefinita latiuscula cinetis, intus subcarbonaceis, fuscis; peritheciis 2-6 in quoque stromate dense constipatis, omnino tectis et ostiolo vix papillato tantum indicatis, globosis, 250-300 μ . cr., crassiuscule membranaceis molliusculis, atris, contextu denso indistincto, fusco-olivaceo; ascis e cylindraceo clavatis antice obtuse rotundatis, postice attenuatis longiusculeque pedicellatis, p. sp. 180×30 , ped. 50×8 , paraphysibus filiformibus tenuibus sæpius ramulosis obvallatis, fere semper tetrasporis; sporidiis rectis distichis, fusoidis, majusculis 60-70 \times 15-18, primo diblastis, serius 9-15-septatis, atque subtoruloso-constrictis, utrinque attenuatis subacutiusculis, hyalinis.

Hab. in cortice *Theobromæ* Cacao L., Bahia de todos los Santos, Brasilia (HEMPEL). — Fungus lichenaceus, gen. *Holstiellæ* affinis.

3. *Calospora oleicola* Speg., Fungi Chilenses (1910) p. 74, cum icon. 4676 — Peritheciis cortice innatis, epidermide disrupta velatis, paucigregariis, stromate parcissimo junctis, globulosis pusillis, vix papillato-ostioliatis, albo-farctis, 150-200 μ . diam.; ascis lanceolatis brevissime pedicellatis paraphysatis octosporis, 100-120 \times 20, sporidiis e cylindraceo-subclavulatis utrinque obtusis, transverse 5-septatis, ad septum medium constrictis, parte infera quam supera conspicue minore, hyalinis, mediocribus, 22-26 \times 8-9.

Hab. in ramis *Oleæ* europææ quos necat, Quinta Normal de Santiago Chile, Amer. austr.

Sect. 7. Phæophragmiæ.

PSEUDOVALSA Ces. et De Not. — Syll. II p. 135, IX p. 820, XI p. 330, XIV p. 577, XVI p. 527, XVII p. 740.

1. *Pseudovalsa longipes* (Tul.) Sacc. — Syll. II, p. 136 — var. *apiculata* Rick, Broteria, IV (1905) p. 162. — *Stromatibus* erumpentibus, dein superficialibus, orbicularibus, nigris, 4 mm. diam., margine corticis obvallatis; peritheciis angulatis, ostioliis brevibus; ascis longe pedicellatis, parte sporifera usque ad 160-200 μ . longa, 15-18 μ . lata, maturis in apicem filiformem productis; sporidiis

usque ad 50-65 \times 8-10, fuligineis, triseptatis, ultimis cellulis hyalinis obtusis, non constrictis, fusoides, guttulatis; paraphysibus filiformibus hyalinis.

Hab. in ramis *Quercus cocciferæ*, Torres Vedras Lusitaniæ. — Species habitu fere *Diatrypella quercinæ* et forte *Melogrammati* affinium.

2. ? *Pseudovalsa Piri* (Hazsl.) Sacc. et Trav. — Syll. XX, p. 543 4678
Diaporthe Piri, Hazsl. Sphær. Hung. pag. 200, t. XIII, f. 53. — Stromatibus conoideo-hemisphæricis, erumpentibus; peritheciis sat numerosis in ostiola fasciculata, divergentia spiniformia, basi incrassata longa productis; ascis fusoides brevissime stipitatis; sporidiis subdistichis fusoides, rectis, utrinque obtusulis, 3-septatis, non constrictis, hyalinis.

Hab. in ramis *Piri communis* in Hungaria. — Sec. auctorem *Diaporthe Strumellæ* affinis.

AGLAOSPORA De Not. — Syll. II p. 133.

1. *Aglaospora aculeata* Petch, Ann. Roy. Bot. Gard. Peradenya, III, 4679 Pt. I (1906) p. 3. — Peritheciis immersis, discretis, 1 mm. diam. vel in stromate nigro carbonaceo aggregatis, 3-5 mm. diam. in collum conicum e cortice emergens 0,75-1,5 mm. productis; ostioli discretis, rotundis; ascis cylindræis, apice truncato attenuatis, stipite curvato, quadrisporis, 180-210 \times 30-35; sporidiis in medio asco maturato aggregatis, cymbiformibus, 90-105 \times 12-15, primum viridi-hyalinis, continuis, plasmate angulato, in guttam albam expulsis, deinde fuligineis, 7-11-septatis.

Hab. in ramis nigrificatis *Theæ viridis*, Ceylon.

TREMATOVALSA Jacobesco, C. R. Ac. d. Sc. Paris CXLII (1906) pag. 289 (Etym. *Tremato* brevis *Trematosphæricæ* et *Valsa*). — Est *Pseudovalsa* sporidiis non appendiculatis. Genus inter *Trematosphæriam* et *Pseudovalsam* medium, sed ut videtur valde heterogeneum.

1. *Trematovalsa Matruchoti* Jacobesco, l. c. pag. 289. — Peritheciis 4680
solitariis v. in stomate nigro carbonaceo plus minusve congregatis, primum immersis dein superficialibus, piriformibus, collo plus minusve elongato recto v. curvulo præditis, 90-320 \times 80-230, parietibus carbonaceis, 10 μ . cr.; ascis octosporis cylindræis 65-80 \times 6; paraphysibus filiformibus ascos æquantibus v. paullo superantibus;

sporidiis fusoides brunneo-olivaceis v. lutescentibus, quadrilocularibus, oculis omnibus grosse 1-guttulatis, 14-16 μ . cr.

Hab. in ramis v. ad truncos, quos rimosos et cancerosos reddit in silvis Valachiae, Romania. — Verisimiliter status spermogonicus est *Cytospora Tiliae*, pycnidicus est *Phoma Tiliae*.

THYRIDARIA Sacc. — Syll. II p. 140, IX p. 821, XI p. 331, XIV p. 578, XVII p. 741.

1. *Thyridaria Cajugæ* Rehm, Ann. Mycol. V (1907) p. 518. — Pe. 468
 ritheciis sub cortice nidulantibus, valsiformiter 20-30 arcte congregatis, stromatice orbiculariter 1-2 mm. diam. ad apicem nigris collectis et obtectis, per epidermidem prorumpentibus, elongatoglobosis, 0,5 mm. diam., membranaceis, collis elongatis in papillulas subglobosas obtusas, poro perspicuo pertusas abeuntibus; ascis clavatis, 50-60 \times 8-9, octosporis; sporidiis subclavatis, rectis v. subcurvatis, medio constrictis, utrinque obtusis, 4-cellularibus, fusciculis, 10-12 \times 3-3,5, distichis; paraphysibus tenerrimis, subramosis.

Hab. ad ramulum Aceris, Ithaca New York Amer. bor. (W. A. RILEY, comm. Dr. ATKINSON). — *Thyridariae Comptoniae* subaffinis.

KALMUSIA Niessl — Syll. II p. 142, IX p. 822, XI p. 331, XIV p. 578, XVII p. 742.

1. *Kalmusia aspera* Morgan, Journ. of Mycol. XI (1905) p. 153. — 4682
 Stromate eutypeo, effuso, indefinito, superficie ob ostiola prominula ruguloso, ligno supra atrato et profundius flavido immerso; peritheciis majusculis, 0,7-1 mm. diam. depresso globosis, nigris, monostichis, immersis, dense confertis et confluentibus, ostioliis breviusculis, rudibus, subcylindraceis, integris; ascis cylindraceis, breviter pedicellatis, 150-180 \times 8-10, octosporis (paraphysatis?); sporidiis elliptico-oblongis, leniter curvis, 3-septatis, 17-21 \times 7-9, cellulis binis interioribus crassioribus et brunneis, apicalibus minoribus et hyalinis.

Hab. in ligno dejecto indurato Gleditschiae spec., Preston, Ohio Amer. bor.

2. *Kalmusia eucalyptina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4683
 (1909) p. 385 — Peritheciis ligno denudato infossis plus minusve prominulis acuteque ostiolatis subseriatis mediocribus, subglobosis sed e latere compressis 300-500 μ . diam.; ascis subfusoides sub-

breviuscule pedicellatis, $120 \approx 12$, octosporis, dense paraphysatis; sporidiis subcylindræis, primo 1-septatis hyalinis, serius 3-septatis chlorinis, $20-22 \approx 6-8$.

Hab. ad palos vetustos Eucalypti globuli diu intemperiiis expositos, La Plata Rep. Argentina Amer. austr.

3. *Kalmusia coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4684 (1909) p. 386. — Peritheciis matrice infossis carbonaceis ostiolo non rarius exsertulo armatis, globosis $120-180 \mu$. diam.; ascis subclavatulis breviter pedicellatis $40-60 \approx 9-10$, paraphysatis; sporidiis distichis ellipsoideo-subclavulatis, primo didymis hyalinis serius triseptatis ad septum medium validius constrictulis, $12-15 \approx 4$, e fuligineo olivaceis.

Hab. ad ramos emortuos Coffeæ arabicæ in hortis Orán, Jujuy Rep. Argentina Amer. austr.

4. *Kalmusia ?oranensis* Spég., An. Mus. Nac. Buenos Aires t. XIX 4685 (1909) p. 386. — Peritheciis hinc inde cortice immutato 3-5-gregariis, matrice infossis non vix ostiolo papillulato exserto manifestis, subglobosis 150μ . diam.; ascis clavatis modice pedicellatis $120 \approx 20-22$, octosporis paraphysatis; sporidiis distichis, fusoideis 5-septatis, $40 \approx 10$, non constrictis, fuligineis.

Hab. ad corticem crassiorem ramorum emortuorum Coffeæ arabicæ, in hortis Orán Jujuy Rep. Argentina Amer. austr.

5. *Kalmusia chilensis* Speg., Fungi Chilenses (1910) p. 83, cum icon. 4686 — Peritheciis laxissime gregariis ligno denudato omnino immer-sis, ostiolo papilliformi vix exserto coronatis, carbonaceis subglobosis parvis, $150-200 \mu$. diam.; ascis cylindræis brevissime pedicellatis densissimeque paraphysatis, $120-130 \approx 15-16$; sporidiis 3-septatis, ad septum medium tantum leniter constrictis fuligineis, loculis mediis obscurioribus grosse uninucleatis, $20-24 \approx 10-11$.

Hab. in ramis emortuis Proustie pungentis in collibus prope Batuco Chile Amer. austr.

6. *Kalmusia Lactuæ* Rehm, Ann. Mycol. VII (1909) p. 528, Ascom. 4687 Exsicc. fasc. 45, n. 1865. — Stromate eutypeo, peridermio demum denigrante; peritheciis cortici interiori primitus albo, dein nigrescenti supra lignum demum denigrato innatis, sæpe dense gregariis, interdum subdispersis, semper peridermio tectis, globosis, glabris, contextu membranaceo, papillula minutissima nigra, obtusa, solum in peridermio hemisphærico-elato prominente, $0,15-0,2 \text{ mm.}$ diam.; ascis clavatis, apice rotundatis, $70-75 \approx 12$, 8-sporis; sporidiis ellipsoideis, rectis v. subcurvatis, 3-septatis, ad septa vix constri-

ctis, cellulis plerumque 1-guttatis, fuligineo-fuscis, 18-20 \approx 6-7, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad basim caulium emortuorum Lactuæ salignæ pr. Hadern-Monachium (Doct. REHM).

MELOGRAMMA Tul. — Syll. II p. 144, IX p. 824, XI p. 331, XIV p. 579, XVI p. 527, XVII p. 742.

1. *Melogramma Pirottæ* Bacc., *Funghi Eritrea*, Ann. Bot. vol. IV 4688 (1906) p. 274, tav. X, fig. 1. — Stromatibus atris primitus cylindricis, in cortice nidulantibus dein erumpentibus, ac parte emersa pulvinata, lata mm. 3 et ultra; peritheciis confertis, piriformibus, ostiolo papillato prominulis, monostichis 200 μ . latis; ascis fusoides, sessilibus, apophysatis 90 \times 18; sporidiis fusiformibus omnino atris, initio bilocularibus, dein 3-5-septatis, medio constrictis, 45 \times 9.

Hab. in ramis languentibus Euphorbiæ spec. in Erythræa (BALDRATI).

2. *Melogramma Henriquetii* Briosi et Cav. *Funghi parass. n. 305* (ex-4689 sicc.) cum icon. — Stromatibus eximie erumpentibus, subglobosis v. obtuse conoideis, nigris, rugulosis, 1,5-2 mm. diam.; peritheciis sphaeroideis prominulis, ostioliis plus minus emergentibus obtusis; ascis clavatis brevissime crasseque stipitatis, apice rotundatis membrana cito diffuente, octosporis; sporidiis distichis v. subtristichis, fusoides, triseptatis, 48-58 \times 10, rectis, utrinque obtusulis, castaneo-fuscis, loculis extimis pallidioribus.

Hab. in cortice Quercus Suberis in Algeria (HENRIQUET, nemorum inspector). — A *M. vagante* sporidiis diversis cito distinguitur.

Sect. 8. Hyalodictyæ.

LEUCOTHYRIDIMUM Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 388 (Etym. *leucos* albus et *Thyridium*, h. e. *Thyridium hyalodictyum*). — Stromata eutypea late effusa nigra. Perithecia matrice omnino immersa, globulosa, sparsa v. confertiuscula. Asci clavati, paraphysati octospori; sporidia muralia hyalina muco vestita.

1. *Leucothyridium crustosum* Speg., l. c. p. 388 cum icon. — Stro-4690 mate nigro per matricem late ambiente; peritheciis hinc inde laxe gregariis sæpe subseriatis globulosis 150 μ . diam.; ascis breviter pedicellatis, late clavatis, supra crasse tunicatis, 70-80 \times 25, para-

physatis octosporis; sporidiis conglobatis v. subtristichis elongato-
obovatis, didymo-5-septatis, ad septum medium valide constrictis,
20 \approx 10.

Hab. ad ramos emortuos *Coffeæ arabicæ* prope Orán, Jujuy Argentina Amer. austr.

PLEOMELOGRAMMA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)
p. 389 (Etym. *pleon* plus et *Melogramma* h. e. *Melogramma dictyo-*
sporum). — Stromata superficialia; perithecia minuta dense con-
stipata tecta; asci octospori; sporidia muralia hyalina.

1. **Pleomelogramma argentinense** Speg., l. c. pag. 389, cum icon. — 4691
Stromatibus parvis intus albis lenticulari-tuberculiformibus, 2-5
mm. diam. et 1-2 mm. cr.; peritheciis globosis, coriaceis, atris,
90-120 μ . diam.; ascis sæpius obclavatis, brevissime stipitatis 50-
55 \approx 10-15, aparaphysatis, octosporis; sporidiis distichis ellipsoideo-
fusoides, transverse 5-septatis, longitudinaliter interrupte 1-2-se-
ptatis, 15-20 \approx 6-7, ad medium præcipue constrictulis, hyalinis.

Hab. ad truncos ramosque cariosos decorticatos *Eriobotryæ*
japonicæ, Santa Catalina prope Buenos Aires Rep. Argentina
Amer. austr.

Sect. 9. Phæodictyæ.

THYRIDIUM Sacc. — Syll. II p. 323, IX p. 920, XI p. 348, XIV
p. 609, XVI p. 553, XVII p. 767.

1. **Thyridium Yerbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4692
(1908) p. 127. — Peritheciis globosis 250-500 μ . diam., ligno de-
nudato cinerescente omnino immersis; ascis cylindraceis brevissime
pedicellatis, apice rotundatis crasseque tunicatis, 150 \approx 10-12, octo-
spor, dense paraphysatis; sporidiis ellipsoideis oblique monosti-
chis, triseptatis, ad septa, præcipue medium constrictulis, localis
longitudinaliter divis, 16-18 \approx 8-9, fuliginis.

Hab. ad truncos ramosque emortuos decorticatosque *Ilicis*
paraguariensis in silva circa S. Pedro Argentina Amer. austr.

2. **Thyridium Sambuci** Earle, Bull. of the New York Bot. Gard. 4693
(1904) p. 294. — Peritheciis areas latas tegentibus, 6-8 in greges di-
spositis v. sparsis, infossis nigris, carbonaceis, non collabescentibus,
300-400 μ . diam., ostiolo erumpenti, minute papillato, liberis (non
valsiformibus); ascis cylindraceis, stipitatis, 150-200 \approx 17-20; para-
Syll. fung. XXII (IX-1912)

physibus copiosis, filiformibus; sporidiis monostichis, fuscis, ellipsoideis, sæpe curvulis, 5-septatis, septo medio constrictis, uno v. pluribus cellulis mediis verticaliter divisus, $30-35 \times 10-14$.

Hab. in ramis emortuis Sambuci, Snow Valley Peak, Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

3. *Thyridium valparadisiacum* Speg., Fungi Chilenses (1910) p. 93, 4694 cum icon. — Peritheciis ligno omnino infossis, lenticularibus, e latere sæpius compressulis, membranaceis, nigris, ostiolo minuto ægre perspicuo superficiem matricis attingente donatis, $150-200 \mu$. diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, octosporis, $150 \times 20-22$, paraphysibus filiformibus ramulosis obvallatis; sporidiis ellipsoideo-didymis, utrinque subacutiusculis, transverse 7-, longitudinaliter 1 v. 2-septatis, mediocribus, olivaceis.

Hab. in ramis emortuis Lobeliæ salicifoliæ, Cerro Alegre de Valparaiso Chile Amer. austr.

4. *Thyridium argentinense* Speg., An. Mus. Nac. Buenos Aires t. XIX 4695 (1909) pag. 399. — Peritheciis ligno immutato totaliter infossis ostiolo vix papillato-prominulo manifestis, globosis, $150-180 \mu$. diam.; ascis subclavulatis breviter pedicellatis, $100 \times 16-18$, dense longeque paraphysatis, octosporis; sporidiis ellipsoideis mono- v. distichis, transverse 7-septatis, septo longitudinali unico, olivaceis, $22-24 \times 9-10$.

Hab. ad ramos emortuos Ricini communis in sepibus La Plata Rep. Argentina Amer. austr. — *Th. platensi* Speg. valde affinis species, notis tamen plurimis, ut videtur, distincta.

5. *Thyridium coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4696 (1909) pag. 389. — Peritheciis cortice crassiore omnino infossis ostiolo vix papillato coronatis, solitariis v. laxe gregariis, globosis, $0,8-1,2$ mm. diam., carbonaceis; ascis clavatis, diffluentibus, dense pseudoparaphysatis, octosporis; sporidiis cylindraceo-subellipsoideis, di-tristichis, 50×15 , transverse 7-9-septatis, septo altero longitudinali interrupto donatis, fuliginis.

Hab. ad truncos ad ramos vetustiores Coffeæ arabicæ, Orán, Jujuy Argentina Amer. austr.

6. *Thyridium cacheutense* Speg., An. Mus. Nac. Buenos Aires t. XIX 4697 (1909) p. 399. — Peritheciis laxe gregariis, ostiolo papillato erumpente vix manifestis, subglobosis, $250-300 \mu$. diam., matricem intus pulchre roseo tingentibus; ascis subclavatis basi pedicello brevi crassoque suffultis, octosporis, $120-130 \times 18-20$, paraphysibus densissime obvallatis; sporidiis oblique distichis, sæpius biconico-elli-

psoides v. leniter subnavicularibus, 28-33 \times 12-15, transverse 7-longitudinaliter 2-3-septatis primo hyalinis demum fuliginis.

Hab. vulgatum ad ramos crassiores emortuos Baccharidis glutinosæ in alveo fluminis Mendozae prope Cacheuta Rep. Argentina Amer. austr.

FENESTELLA Tul. — Syll. II p. 325, IX p. 922, XI p. 349, XIV p. 610, XVI p. 553, XVII p. 766.

1. *Fenestella præandina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4698 (1909) p. 400. — Stromatibus sæpius irregulariter linearibus 5-20 mm. long., 1-2 mm. cr., gibbulosis atris, perithecia vix prominula ostiolo vix papillato crasso coronata subcarnosulo-coriaceella, atra, 300-400 μ . diam., obvolventibus; ascis linearibus paraphysatis, 200-255 \times 18-20, octosporis; sporidiis mediocribus ellipsoideis transverse 3-, verticaliter 1-septatis, lutescenti-olivaceis, 32-34 \times 11-12.

Hab. ad ramos crassiores emortuos Proustiae ilicifoliae in præandinis Cacheuta prope Mendoza, Argentina Amer. austr.

2. *Fenestella subvestita* Ferdinands. et Winge, Botan. Tidsskrift 29 4699 Bd. (1909) p. 313, fig. 5. — Peritheciis denis-vicensis in cortice exteriori circinato-confertis, ostiolis disciformi-conglutinatis per peridermium pustuliformiter levatum erumpentibus, flocco flavidulo parce obsessis, zonula flavo-brunnea, e substantia mutata corticis formata, 1,5-2,5 mm. diam. cinctis; ascis cylindraceutis, superne applanato-rotundatis, parte sporifera 100-125 μ . long., 8-10,5 μ . lat., pedicello circ. 25 μ . long. instructis; sporidiis octonis v. rarius quaternis, monostichis, ellipsoideis, transverse crasse 3-septatis, loculo uno ex duobus mediis interdum septo longitudinali obliquo instructo, ad septa vix constrictulis, 15-19 \times 7,5-8,5, griseolobrunneis, irregulari-guttulatis; paraphysibus numerosis, filiformibus, guttulatis, 3 μ . crass., ascos parum superantibus; pycnidiis parietibus anfractuosius spurie v. omnino multilocularibus; sporulas in basidiis e basi ramosis, 15-20 μ . long., solitarie acrogenas, oblongo-bacillares, 2-3 \times 0,75, hyalinas foventibus.

Hab. ad ramos siccios corticatos Alni glutinosæ in pelude Lyngby Mose dicta prope Hafniam Daniæ.

3. *Fenestella endoxantha* Speg., An. Mus. Nac. Buenos Aires t. XIX 4700 (1909) p. 400. — Stromatibus peridermio innatis, difformibus, extus fuscis intus citrinis, irregulariter sublenticularibus 1,5-2,5 mm. diam., favoso-loculigeris; peritheciis stromate infossis, paucis, globosis 250-400 μ . diam., fulvo-fuscis; ascis linearibus paraphysatis

crasseque pedicellatis, parte spor. $120 \approx 15$, ped. $15-20 \approx 8-10$; sporidiis oblique monostichis, obtusissime ellipsoideis, $20 \approx 10$, transverse 3-, longitudinaliter 1-septatis, primo hyalinis dein subopace fuligineis.

Hab. ad ramos emortuos Casuarinæ strictæ in hortis Claypole prope Buenos Aires Rep. Argentina Amer. austr.

Sect. 10. Scolecosporæ.

CRYPTOSPORA Tul. — Syll. II p. 361, IX p. 339, XI p. 353, XVII p. 776.

1. **Cryptospora Saccardiana** Trav. et Spessa, Bol. Soc. Brot. XXV 4701 (1910) pag. 168, t. I, f. 4. — Pustulis dense sparsis, ellipsoideis, $1\frac{1}{2} \approx \frac{1}{2}$ -1 mm., albescentibus; stromate cortice nidulante, tenui, nigro; peritheciis 2-3 stromate basi tantum immersis, globulosis, $140-160 \mu$. diam., contextu melleo tenui, collibus late conoideis peridermium pustulatim sublevantibus et demum perforantibus; ascis ellipsoideis vel late fusiformibus, subsessilibus, membrana tenuissima præditis, octosporis, $90-120 \approx 25-35$; sporidiis parallele fasciculatis, cylindraceo-vermicularibus,asco paullo brevioribus, utrinque rotundatis, leniter curvatis vel subrectis, 2-5-septatis vel pseudo-septatis, initio hyalinis dein vix fuscidulis, $70-100 \approx 6-8$.

Hab. in ramis Cinnamomi dulcis in Horto Botanico conimbricensi Lusitaniæ (A. MOLLER).

2. **Cryptospora suffusa** (Fr.) Tul. — Syll. II, p. 361. — var. **val-soides** Rehm, Ann. Mycol. IV (1906) p. 476. — A typo differt peritheciis magis copiosis (12-18), stromate nigro prorumpente, usque ad 3 mm. longo; ascis angustioribus 8-9 μ . lat.

Hab. in ramis emortuis Alni viridis, Wechsel Austriæ inf. (v. HÖHNEL).

3. **Cryptospora chilensis** Speg., Fungi Chilenses (1910) p. 96, cum 4708 icon. — Stromatibus ligno denudato subcinerescente innato-insidentibus, vix prominulis, parvulis, ellipsoideis, cinereo-fuscis; peritheciis in quoque stromate paucis (2-5) majusculis omnino immersis, circinantibus, $700-750 \approx 300$; ascis linearibus breviter pedicellatis paraphysatis, $500 \approx 10-11$; sporidiis filiformibus multiseptatis perdilute chlorinis, ascos subæquantibus, loculis singulis $10 \approx 2$.

Hab. in ramis siccis Proustiae pungentis in collibus prope Batuco Chile Amer. austr.

WINTERELLA Sacc. — Syll. II p. 364, XIV p. 620.

1. *Winterella Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4704 (1908) p. 128. — Peritheciis sparsis v. laxe gregariis ligno dealbato omnino immersis, globosis, 250-400 μ . diam., membranaceis; ascis cylindraceo-fusoideis antice acutiusculis rotundatis crasseque tunicatis postice sensim breviterque cuneato-pedicellatis, 120-150 \times 10-12, octosporis, laxe tenuissimeque paraphysatis; sporidiis fasciculatis filiformibus multiseptulatis, hyalinis, 100-120 \times 2-2,5.

Hab. ad ramos aridos decorticatos Ilicis paraguariensis circa S. Pedro Rep. Argentina Amer. austr.

2. *Winterella platensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4705 (1900) p. 403. — Stromatibus effusis, repando-ellipsoideis, 2-10 mm. long., 1,5 mm. lat., primo tectis dein superficialibus, atris levibus; peritheciis sub cortice stromatice dense constipatis, sublentularibus 150-250 μ . diam.; ascis fusoideis, basi breviter attenuato-pedicellatis, 100 \times 12-13, aparaphysatis, octosporis; sporidiis acicularibus 70-80 \times 3, multi-guttulatis, hyalinis.

Hab. ad ramos aridos, frigore hiemali enecatos Pircuniae dioicæ in silva Santa Catalina Rep. Argentina Amer. austr.

3. *Winterella Rickiana* Rehm, Ascom. exs. n. 1741 (1907), Ann. Myc. 4706 V (1907) p. 470. — Stromatibus superficialiter innatis, orbicularibus, maculatim plus minusve dispersis v. congregatis, plerumque in longitudinem ramuli expansis, atris; peritheciis 3-5 (rarius pluribus) innatis verrucoso-elevatis, c. 2 mm. diam.; peritheciis globulosis, membranaceis, parenchymatice contextis, glabris, 300 μ . circ. lat., ostiolo subconoideis, poro perspicuo demum pertusis; ascis cylindraceis, versus apicem angustatis, 120 \times 8-10, tetrasporis; sporidiis filiformibus, rectis, hyalinis, obtusis, pluries septatis, c. 90 \times 3, parallele positae; paraphysibus longis, septatis, hyalinis, 4 μ . cr.

Hab. in arbore ignoto vulgo «Achaete» Sao Leopoldo Rio Grande do Sul Brasilia (Rick S. J.).

SILLIA Karst. — Syll. II p. 361.

1. *Sillia biformis* Rick, Broteria V (1906) p. 49. — Stromate pulvinato, 1-3 cm. diam., brunneo hypoxylideo, superficiali, intus flavo-viridulo; peritheciis aggregatis, primitus in stromate nidulan-

tibus collo pertuso, demum superficialibus, atris, coriaceo-rigidis, rugulosis, subhirsutis, 0,5 mm. latis, ostiolo brevi aut longiusculo; ascis 70-80 \times 6-8, sessilibus; sporidiis filiformibus, 60 \times 2, hyalinis v. subflavidulis, septatis, apicibus acutis, curvulis, octonis; paraphysibus dilutis.

Hab. in ramo corticato, Rio Grande do Sul Brasiliæ. — In stromate juniore inveniuntur conidia ovalia, 10 \times 6, fuliginea, unicellularia.

Fam. 6. Pseudosphæriaceæ v. HÖHNEL.

PSEUDOSPHERIACEÆ v. Höhnel Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI (1907) Abt. I, Fragm. z. Myk. III, p. 129 et IV (1907) p. 631. — Stromata minuta, immersa, perithecioides, plurilocularia. Asci singuli in quoque loculo; sporidia varia. Familiola, ut videtur, inter Sphæriaceas et Dothideaceas media. — Teste von Höhnel, præter *Pseudosphæriam* et *Wettsteininam*, huc quoque pertinent *Scleroplea* Sacc. et *Pyrenophora* Fr.

WETTSTEININA v. Höhnel, Fragm. z. Mykol. III, Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 126 (Etym. ab Eq. R. Wettstein prof. vindobonensi). — Stroma minutum, rotundatum v. discoideum, immersum, dein epidermide lacerata liberum, nigrum, perithecioides, pseudoparenchymate polyedrico constitutum; loculi parci, unistratosi, ascum unicum ovoideum octosporum limitantibus; sporidia hyalina, bilocularia, cellulæ inæqualiter crasse intus ob 1-3 annulos parum prominentes simulate divisæ. — Huc ducentæ sunt species (saltem teste von Höhn. l. c. CXVI (1907) p. 129 et 635): *Massarina gigantospora* Rehm — Syll. IX, p. 825 — *Leptosphæria mirabilis* Niessl — Syll. II, p. 33 — *Sphærulina callista* var. *Vossii* Rehm — Syll. IX, p. 847.

1. **Wettsteinina gigaspora** v. Höhnel, Fragm. z. Mykol. III, Sitzb. 4708 k. Ak. d. Wissensk. Wien Bd. CXVI, Abt. I (1907) p. 126, tab. 1, fig. 1 a-e (sub nomine *W. alpina*!). — Stromatibus sparsis carbonaceis, nitidis, nigris, 500-700 μ . lat., 260 μ . cr.; hypothecio 60-70 μ . cr. contextu sterili 150-200 μ . lato; loculis 5-6, irregulariter ovoideis; asco parietibus usque ad 15 μ . cr., irregulariter ovoideo, plerumque octosporo. 180-240 \times 120-140; sporidiis con-

globatis, hyalinis, utrinque rotundatis, 120×44 , bilocularibus, tunica duplici interna tenui cum lineis anuliformibus parum prominentibus, externa 8 μ . circ. cr.; contextu minute granuloso.

Hab. in caulibus siccis Monocotyledoneæ cujusdam prope Gurschewy et Cej in Romania (LOITLESBERGER).

PSEUDOSPHERIA von Höhnelt, *Fragm. z. Mykol., Sitzb. k. Ak. d. Wiss. Wien*, Bd. CXVI, Abt. I (1907) pag. 129 et 635 (Etym. *pseudes falsus Sphæria*). — A genere *Wettsteinina* distinguitur imprimis sporidiis genuine plurilocularibus, non bilocularibus et tantum polyblastis. — Ad hoc genus, teste v. Höhn., spectant *Sphærulina callista* Rehm — Syll. II, p. 188 — et *Leptosphaeria pachyasca* Niessl — Syll. II, p. 171 (*Metasphaeria*).

Fam. 7. Dothideaceæ NITSCHKE

Sect. 1. Allantosporæ.

DOTHIDEOVALSA Speg., *An. Mus. Nac. Buenos Aires t. XIX* (1909) p. 414 (Etym. *Dothidea* et *Valsa* inter quas media). — Stromata innato-erumpentia tumidula atra; loculi minuti immersi albo-farcti; asci clavulati octospori; sporidia parva, allantoidea curvula, hyalina.

1. *Dothideovalsa tucumanensis* Speg., l. c. pag. 414. — Stromatibus 4709 linearibus erumpentibus 1-10 mm. long., 1-1,5 mm. cr., sæpius dense gregariis et ramulum late ambientibus, intus extusque nigris, glabris, levibus v. vix rugulosis, loculis globosis vix papillato-ostiolatis; ascis clavulatis 18-20 \times 3, aparaphysatis; sporidiis 2-3-stichis, cylindraceis curvulis, utrinque rotundatis 4-6 \times 1, primo hyalinis serius subchlorinis.

Hab. vulgata ad ramulos vivos *Chætothylacis tocanini* in Parque Roca, Tucuman, Argentina Amer. austr.

Sect. 2. Hyalosporæ.

BAGNISIELLA Speg. — Syll. II p. 589, IX p. 1004, XVI p. 616.

1. *Bagnisiella Rübsaameni* P. Henn., *Hedwigia XLVII* (1908) p. 268. 4710
— Stromatibus cauliculis tumefacientibus, erumpentibus, cæspitosis,

subgloboso-confluentibus, subcoriaceis, atro-fuscis, loculis immersis, subovoideis; ascis clavatis apice rotundatis, tunicatis, 8-sporis, 80-100 \times 20-26; paraphysibus copiosis, hyalinis; sporidiis oblonge ellipsoideis, clavatis v. subfusoides, utrinque obtuso-rotundatis, continuis, hyalinis, 20-32 \times 9-12.

Hab. in ramis *Cassia* sp., Surinan, Rio Pará Amer. merid. (MICHAELIS).

2. *Bagnisiella Uncariæ* (Rac.) Sacc. et Trott., *Botryosphaeria Uncariæ* 4711
 Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 393. — Stromatibus epiphyllis, nigris, rotundatis 0,5 mm. alt., 1-3 mm. latis, medio depressis et sæpe centro perforatis; peritheciis circulariter dispositis, globosis 350-500 μ . lat., excipulo vix discreto, ad marginem stromatis immersis, ostiolo minuto, impresso; ascis breviter clavatis octosporis; sporidiis ovoideis utrinque rotundatis, rectis v. leniter flexis, continuis, hyalinis, levibus, 19-24 \times 8-11.

Hab. in foliis *Uncariæ* spec. prope Soekanegara-Preanger ins. Javæ.

3. *Bagnisiella tjampeana* (Rac.) Sacc. et Trott., *Botryosphaeria tjampeana* 4712
 Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 392. — Hypophylla; stromatibus extus nigris, intus albido-brunneis, 680-800 μ . diam. peritheciis copiosis, globosis, 300-340 μ . diam., stromate immersis, ostioloque 200-220 μ . longo, in stromatis superficiem dehiscente, papillaque depressa præditis; ascis aparaphysatis, stipatis, octosporis 38-43 \times 10-12 (in medio); sporidiis in medio asco cruciatim positis, continuis, levibus, hyalinis, ovoideis, 9-11 \times 3-4.

Hab. in foliis *Malloti Blumeani*, ad gallas globulosas nervicolas, *Tjampea* pr. Buitenzorg ins. Javæ.

4. *Bagnisiella Molluginis* (v. Höhn.) Sacc. et Trott., *Botryosphaeria Molluginis* v. Höhn., Sitzb. k. Ak. Wien, CXV, Abt. I (1906) pag. 18. — Stromatibus sparsis, erumpentibus subrotundis v. oblongis, discoideis, epidermide cinctis, nigris, carbonaceo-molliusculis, subinde concaviusculis, 0,5-1 mm. lat., 260 μ . cr., cellulis polyedricis, 25 μ . diam.; loculis copiosissimis (50-70) unistratosis, ovato-oblongis, 100 \times 50-80; ascis copiosis, clavatis, sessilibus, 60-80 \times 8-10, 6-8-sporis; sporidiis ellipsoideo-fusiformibus, utrinque obtusulis, 14-18 \times 5-7, hyalino-farctis, eguttatis.

Hab. in caulibus emortuis *Galii Molluginis* in comit. Pressburg Austriæ (A. ZAHLBRUCKNER). — E descriptione, a typo generis (*B. Bérangeriana*) loculis omnino immersis longe recedit.

5. *Bagnisiella anceps* (v. Höhn.) Sacc. et Trott., *Botryosphaeria an-* 4714

ceps v. Höhn. Fragm. Mykol. VII (1909) p. 28. — Stromatibus superficialibus, nigris, rugulosis, perithecioides, inæqualiter globosis, depressiusculis, sparsis v. minute aggregatis, basi angustata sessilibus, 360-500 v. 300-360, intus 1-locularibus, cortice carbonaceo 40-100 cr., extus rugoso, cellulis 20 μ . diam. nigris conflato; loculo astomo, vertice diffracto-dehiscente; ascis copiosis, crasse clavato-fusoideis, superne crasse tunicatis, rotundatis, deorsum in stipitem 40 μ . long., filiformem tenuatis, octosporis, 105-150 v. 22-32; sporidiis subdistichis, teneris, minute flavido-granulosis, continuis, versiformibus, ex ovoideo fusoideis, utrinque obtusis, 22-28 v. 11-17; paraphysibus genuinis nullis.

Hab. in ramis tenellis emortuis, Sao Paulo Brasilæ (WETTSTEIN et SCHIFFNER). — A typo *Botryosphaeria* omnino desciscens.

OXYDOTHIS Penz. et Sacc. — Syll. XIV p. 674.

1. *Oxydothis insignis* Spegazz., Fungi Paulist., Rev. Mus. La Plata 4715 t. XV (1908) p. 26, fig. G. — Stromatibus parenchymate innatis, repando-suborbicularibus 1-2,5 mm. diam., duriusculis subcarbonaceis, intus extusque nigerrimis, ad epiphyllum vix prominulis sæpius obsoletis, cinerescenti-squarrulosis punctulatis v. concaviusculis, ad hypophyllum pulvinulatis non v. vix bullosis, semper maculis sordide fusco-ferrugineis latiusculis subdeterminatis cinctis; loculis globosis v. e mutua pressione angulatis, 125-175 μ . diam., nucleo albo faretis, ad hypophyllum adpressis, ostiolo minuto perforatis; ascis antice obtusis crassiusculeque tunicatis postice cuneatis breviuscule pedicellatis, 100-120 v. 15-20, paraphysibus filiformibus sublongioribus obvallatis; sporidiis distichis v. conglobatis utrinque acutissimis 4-blastis 55-60 v. 8, serius forsan didymis, 40 v. 8, fusoideis, sublunatis v. sigmoideis, utrinque appendice elongato-conoidea 10-12 μ . auctis, semper tamen hyalinis.

Hab. ed folia *Eugeniæ* cujusdam prope Ipiranga Moça Brasilia (USTERI).

2. *Oxydothis pertusarioides* Rehm, in Ann. Mycol. V (1907) p. 530. 4716 — Stromatibus dense gregariis, ovato-orbicularibus, applanatis, in cortice griseo-albo rugosulo prominenter innatis ab eoque obductis, intus griseis, 1-1,5 mm. lat., 1 mm. alt., loculis in quoque stromate 2-3 oblongis, 0,3-0,5 μ . long., apice angustatis et in disculum punctiformem nigrum, impressum abeuntibus, contextu stromatis et hypothecii griseo-albo, crasso, parenchymatico, gonidiis carente; ascis clavatis, crasse tunicatis, apice rotundatis, circiter

150-180 \approx 50-60, octosporis; sporidiis oblongo-fusiformibus, utrinque rotundatis, rectis vel subcurvatis, 1-cellularibus, hyalinis, episporio 5-6 μ . cr. intus granulosus, dilutissime flavidulus, 110-115 \approx 23-30, distichis; paraphysibus ramosis, septatis, 5 μ . cr., hyalinis; epithecium dilutissime fuscidulum formantibus. — Jodii ope asci toti valde cæruleo tinguntur.

Hab. ad ramulum, Alta da Serra, S. Paulo, Brasilia (USTERI).

— Habitus lichenoideus; a typo *Oxydothidis* sporidiis utrinque rotundatis recedit, hinc quoad genus dubia stirps.

PHYLLACHORA Nits. — Syll. II p. 594, IX p. 1006, XI p. 368, XIV p. 663, XVI p. 617, XVII p. 828.

1. *Phyllachora Erythroxyli* Rehm, Annal. Mycol. VI (1908) p. 318. 4717

— Stromatibus punctiformibus, epiphyllis, in folio haud decolorato gregariis, late dispersis, sensim 2-5 lineariformiter connatis, circinantibus, 0,15-0,3 mm. diam., subconoides, sessilibus, poro perspicuo pertusis, atris; ascis fusiformibus, 50-60 \approx 12-14, octosporis; sporidiis fusoides, utrinque acutatis, rectis, hyalinis, 1-cellularibus, 20-22 \approx 4, bi-tri-stichis; paraphysibus mucosis.

Hab. ad folia *Erythroxyli* suberosi, Villa Mariana, Sao Paulo Brasiliæ (USTERI) — Habitus potius *Physalosporæ*; affinis *Phyll. Collæ* et *Ph. Condaliæ*.

2. *Phyllachora corallina* von Höhn. Fragm. Mykol. VII (1909) in 4718

Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 845. — Maculis nullis; stromatibus hypophyllis, omnino adnatis, depressis, nigris, nitidulis rugulosis, æqualibus, ostiolo plus minus depresso v. leviter 30-40 μ . lato præditis, 200-250 μ . diam., rotundatis v. usque ad 1,5 cm. elongatis, dentritice-coralloideo-reticulato ramosis; contextu stromatis parenchymatico; loculis laxiusculis infra depressis, supra conoideo-angustatis, 160-230 μ . latis et altis; ascis cylindraceis, breviter stipitatis, 70-80 \approx 5-6; paraphysibus filiformibus, paucis v. nullis; sporidiis monostichis, hyalinis, ellipsoideis, utrinque acutatis, 8 \approx 4.

Hab. in foliis vivis verisimiliter Rutaceæ cujusdam (? Clausena, ? Murraya), in silva primæva pr. Tjibodas in ins. Java (SCHIEFFNER).

3. *Phyllachora intermedia* Speg. — Syll. IX, p. 1012 — var. luxu- 4719

rians Rehm, Ascom. Exsicc. fasc. 37, n. 1660, Ann. Mycol. IV (1906) pag. 406. — Stromatibus cauliculis, magnis, gallæformibus,

eximie papillatis, usque ad 3 cm. longis et latis, usque ad 2 cm. altis.

Hab. in ramulis Sapindaceæ, Sao Leopoldo Rio grande do Sul, Brasilia (J. RICK).

4. *Phyllachora duplex* Rehm, Ann. Mycol. VI (1909) pag. 538. — 4720

Stromatibus in centro macularum orbicularium demum confluentium, tenuissime fuscidulo-cinctarum, arescendo albo-roseolarum, 0,8-1 cm. diam., sessilibus, epiphyllis, haud conspicuis in hypophyllo, irregulariter orbicularibus, 0,3-0,5 mm. diam., verruculosi, atris, haud nitentibus; loculis innatis 12-15, globosis, papillula minutissima prominentibus; ascis cylindraceis 120×15 , octosporis, J-; sporidiis ellipsoideis, utrinque rotundatis, unicellularibus, guttas oleosas 2 magnas includentibus, hyalinis, 18×10 , monostichis; paraphysibus ramosis, 3 μ . cr.

Hab. ad folia Serjanæ, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — *Dothidella Serjanæ* affinis sed omnino diversa. In ramulis adest *Euryachora duplicata* Rehm n. sp.

5. *Phyllachora Leeæ* Koord., Botan. Untersuch. (1907) pag. 182. — 4721

Stromatibus amphigenis, tectis, vix erumpentibus, sparsis, pulvinatis, 1-1,5 mm. diam., atris, coriaceis, folii pilis persistentibus laxè echinulatis; loculis subglobosis, vix ostiolatis; ascis cylindraceis $100-140 \times 10-15$ octosporis; sporidiis uniseriatis, continuis, hyalinis, ellipsoideis, utrinque acutis v. obtusis, $12-15 \times 7-8$; paraphysibus filiformibus continuis, hyalinis, ascos æquantibus.

Hab. in foliis vivis Leeæ rubræ prope Gombong, Java (KOORDERS).

6. *Phyllachora Canarii* P. Henn., Hedwigia XLVII (1908) p. 254. — 4722

Stromatibus amphigenis gregarie sparsis, rotundatis, planis, 1,5-2,5 mm. diam., atris, subverrucoso-ostiolatis; loculis immersis subglobosis plurimis; ascis clavatis vertice obtusiusculis, paraphysatis, 8-sporis, $50-80 \times 7-10$; sporidiis oblique monostichis v. subdistichis, oblonge subfusoides, utrinque obtusis, guttulatis, hyalinis, $10-15 \times 3,5-4$.

Hab. in foliis Canarii luzonici, Semerara ex insulis Philippin. (MERRILL).

7. *Phyllachora ? Aberiæ* P. Henn., Engl. Bot. Jahrb. XLI (1908) 4723

p. 272. — Stromatibus amphigenis, gregarie sparsis, pulvinatis rotundatis, atro-nitentibus, ca. 1 mm. diam.; ascis clavatis, obtusis, paraphysatis, c. $80-110 \times 10-12$; sporidiis subdistichis, oblongis, hyalinis (immaturis).

Hab. in foliis *Aberiaë caffræ*, Uitenhage, Transvaal Africae (EVANS).

8. *Phyllachora peribebuyensis* Speg. — Syll. IX, pag. 1017 — var. 4724
brachycarpa Spegazz., Fungi Paul, Rev. Mus. La Plata t. XV, p. 25. — Stromatibus pulvinato-superficialibus medio substipitato-adfixis ut in *Coccoidea* P. Henn. Specimina quæ adsunt a typo recedunt sporidiis nonnihil brevioribus, 10-14 \times 5-7.

Hab. ad folia languida *Melastomaceæ* cujusdam prope Sao Paulo, Brasilia (USTERT).

9. *Phyllachora aggregatula* Syd., Ann. Mycol. VIII (1910) p. 38. — 4725
 Stromatibus epiphyllis, in hypophyllo haud conspicuis, sine maculis, minutis, c. $\frac{1}{8}$ mm. diam., plerumque compluribus in greges minutas irregulares laxè dispositis, plerumque tantum 1-locularibus, atris, nitidis, rotundatis, hemisphærico-prominulis; ascis clavatis, 40-55 \times 14-18, octosporis; sporidiis oblique mono-distichis, ellipsoideis, utrinque rotundatis, continuis, hyalinis, guttulatis, 10-14 \times 5-7.

Hab. in foliis vivis *Melastomatis fuscis*, Mount Marideles, Bataan, prov. Luzon in ins. Philippinensibus (E. D. MERRILL).

10. *Phyllachora Petitmenginii* P. Maire, Ann. Myc. VI (1908) p. 150, 4726
 fig. 6, tab. I, fig. 5. — Stromatibus epiphyllis, interdum totam folii crassitudinem occupantibus et in pagina inferiore præminentibus, in macula fulvida solitariis, nigris, nitentibus, levissimis, convexo-prominulis, plerumque rotundatis vel ellipticis, 0,75-1,5 mm. diam.; loculis 2-6, subglobosis; ostioli minute papillatis; ascis octosporis, clavatis vel subfusoides, parte sporifera 80-110 \times 20-25, basi in pedicellum filiformem usque ad 60 μ . longum contractis; sporidiis distichis, oblongo-cylindraceis, hyalinis, levibus, utrinque rotundatis vel obtusis, 26-33 \times 7-8; paraphysibus filiformibus.

Hab. in foliis *Myrtaceæ* cujusdam, Garuja prope Santos, Brasilia. — *Phyll. Tonduzii* suaffinis.

11. *Phyllachora Lindmani* Starb., Ascom. Schwed. Chaco - Cordill. 4727
 Exp., Arkiv f. Bot. Bd. V (1905) p. 13, fig. 9. — Stromatibus epiphyllis, ascigeris applanatim pulvinatis, irregulariter costatogrugosis vel tuberculatis, varie determinatis, undulatis vel lobatis, sæpe rhombiformibus, nitidulis, nigris, 3-10 mm. latis; stromatibus pycnidicis aliis circinantibus, aream sæpissime rhombiformem limitantibus, peripherice ramosis, crustaceis vel submembranaceis, aliis sed rarius solitariis elliptice vel varie limitatis, maculis fuscis, arescendo folii obscurioribus insidentibus; sporulis hyalinis, allan-

toideis, $5-9 \approx 1,5$ tectis, griseo-farctis, astomis, tuberculatim prominentibus, forma varia, plerumque undulato-lobata determinatis, $400-500 \mu$. diam.; contextu coriaceo-carbonaceo, denique pulveraceo; ascis crasse cylindraceutis, sursum obtusatis vel fusiformibus, utrinque attenuatis, $75-90 \approx 9-16$; sporidiis octonis, valde variantibus, plerumque ellipsoideis, non raro elongatis et curvulis, conglobatis vel distichis, hyalinis, $16,5-25 \approx 6,5-9$; paraphysibus filiformibus, numerosissimis.

Hab. in foliis Myrtaceæ, Sao Paulo, Cruz Alta, Brasilia (LINDMAN). — Quoad habitum *Rhytisma* in memoriam revocans, ob perithecia autem etiam jam evacuata non rimosim dehiscencia ad *Phyllachoram* ducenda est hæc distincta species. *P. rhytismoides* Cda, cui sec. specimen a Berkeley determinatum species hæc affinis, sec. figuram tamen apud Corda (Ic. fung. IV, 42 fig. 122) plane divergit.

12. *Phyllachora Ipirangæ* Speg., Fungi Paulist., Rev. Mus. La Plata 4728 t. XV, p. 24. — Maculis nullis; stromatibus planissimis, 1 mm. diam., vix prominulis eximie determinatis intus extusque nigris, levibus; loculis pusillis $100-120 \mu$. diam., albo-nucleatis poro minutissimo ad epiphyllum perforatis; ascis apice subtruncato-rotundatis crassiusculeque tunicatis, medio v. parum infra subincrassatis, basim versus cuneato-attenuatis, in pedicellum brevem productis $80-90 \approx 10-12$, paraphysibus filiformibus longioribus obvallatis; sporidiis mono- v. distichis utrinque subacutiuscule rotundatis $15-16 \approx 8$, primo grosse 1-2-guttulatis dein continuis, hyalinis.

Hab. ad folia languida Eugeniæ ejusdam, Ipiranga Moça Brasilia (USTERI). — Species a cæteris in *Myrtaceis* vigentibus, cognitis, distinctissima.

13. *Phyllachora biguttulata* Theiss., Beih. Bot. Centralbl. Bd. XXVII 4729 (1910) Abt. II, p. 390. — Maculis brunneis irregularibus 3-6 mm. diam.; stromatibus opposito-amphigenis, 2-4 mm. diam. circularibus v. irregularibus, crassiuscule pulvinatis subnitentibus, papillis minutis sparse punctatis; loculis plane immersis, subglobosis; ascis cylindraceutis, breviter stipitatis, p. sp. $50-65 \approx 8-10$, supra rotundatis; sporidiis monostichis, hyalinis, continuis, rectis, ellipsoideis utrinque rotundatis, $10-12 \approx 5-5,5$, guttulis 2 nitidis specie septatis.

Hab. in foliis vivis Campomanesiæ rhombeæ in silva Sao Leopoldo Rio Grande do Sul Brasiliæ. — A *Phyllach. opposita* Henn. cui affinis, imprimis differt ascis et sporidiis.

14. *Phyllachora Myrrhīnii* Theiss., Beih. Bot. Centralbl. Bd XXVII 4780 (1910) Abt. II, p. 390. — Stromatibus epiphyllis, in hypophyllo nullatenus visibilibus, maculis fuscis tenuissimis insidentibus, minutis, vix 1 mm. diam., raro æqualiter pulvinulatis et plurilocularibus (3-5), plerumque unilocularibus, applanato-conoideis, opacis, vertice subnitidis, papilla vix visibili nisi in plurilocularibus; ascis clavatis, pedicellatis, supra rotundatis, p. sp. 55-72 \times 12-16, pedicello c. 12-15 μ . longo; sporidiis plerumque distichis, tunica mucosa tenuissima involutis, hyalinis, rectis, ellipsoideis, utrinque rotundatis, initio 2-guttatis et specie septatis, dein eguttatis homogeneis (intus non granulatis), 14-16 \times 5 v. 12-14 \times 6-6.5.
Hab. in foliis vivis *Myrrhīnii* rubriflori in silvula Sao Leopoldo, Rio Grande do Sul Brasilīæ.
15. *Phyllachora Bakeriana* P. Henn., in Rehm Ascom. exs. fasc. 42, 4781 n. 1788; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).
Hab. in *Cassia Hoffmannseggii*, Parà Brasilia (C. F. BAKER).
16. *Phyllachora luzonensis* P. Henn., Hedwigia XLVII (1908) p. 255. 4782 — Maculis effusis, fuscidulis; stromatibus amphidymis angulato-rotundatis, sparsis v. gregarie confluentibusque planis, atris; loculis immersis, numerosis, ostioli hypophyllis, verrucoso-prominulis; ascis clavatis, vertice obtusis, paraphysatis, 8-sporis, 60-80 \times 5-6; sporidiis ellipsoideis interdum ovoideis, hyalinis, 8-11 \times 3.5-4.
Hab. in foliis *Milletiæ* Merrilli, Luzon, Maragondong ins. Philippin. (MERRILL).
17. *Phyllachora Parkiæ* P. Henn., Hedwigia XLVII (1908) p. 255. 4783 — Maculis rotundatis v. effusis, flavo-fuscidulis; stromatibus epiphyllis sparse gregariis interdum confluentibus, minutis, pulvinatis, atro-nitentibus, loculis paucis immersis, globulosis; ascis clavatis, apice obtuso-rotundatis, paraphysatis, 8-sporis, 45-70 \times 8-12; sporidiis ellipsoideis, obtusis, oblique monostichis v. subdistichis, 2-guttulatis, hyalinis, 7-10 \times 5-6.
Hab. in foliis *Parkiæ* Roxburghii, Luzon, Prov. Bataan Lamao et Prov. Rizal, Montalban Ins. Philippin. (COPELAND, MERRILL).
18. *Phyllachora Pongamiæ* P. Henn., Hedwigia XLVII (1908) p. 255. 4784 — Maculis minutis fuscidulis; stromatibus amphidydimis, sparsis rotundatis, planis, atro-subnitentibus, 1-2 mm. diam; loculis immersis, numerosis, ostioli subverrucoso-prominulis; ascis clavatis,

obtusis, 8-sporis, paraphysatis, 60-70 \times 8-10; sporidiis oblique monostichis interdum subdistichis, oblongis v. ovoideis, 10-13 \times 3,5-4.

Hab. in foliis Pongamiæ glabræ, Mindanao, Daraô Ins. Phillippin. (COPELAND).

19. *Phyllachora paulensis* Rehm, Ascom. exsicc. n. 1747 (1907), Ann. Mycol. X (1907) p. 471. — Stromatibus in epiphyllis haud mutato plerumque gregariis, sessilibus, irregulariter orbicularibus v. oblongis, 1-3 mm. diam., atris, convexis; loculis 10-12 innatis, globosis, minutissime ostiolatis, interdum conoideo-protuberantibus, verrucosis, carbonaceis, intus atris; ascis clavatis 70-80 \times 15, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttis oleosis repletis, strato tenui mucoso obductis, hyalinis, 10-12 \times 7-8, distichis; paraphysibus filiformibus 3 μ . cr.

Hab. in foliis Leguminosæ cujusdam, Araraquara prov. Sao Paulo, Brasilia (NOACK).

20. *Phyllachora Gœppertiae* Theiss., Ann. Mycol. VI (1908) p. 535. — 4736 Maculis minutis, subrotundis, læticoloribus, dein exaridis v. brunnescentibus; stromatibus amphigenis, sparse gregariis, 0,5-1 mm. diam., atris, in epiphyllis nitentibus, subconoideis, in hypophyllo magis applanatis, subopacis, loculis paucis v. solitariis, ostiolo minuto prominulo; ascis cylindræo-clavatis v. plus minus ventricosis, 80-100 \times 15-20; sporidiis globosis v. ellipsoideis, typice 12-14 \times 10, usque ad 18 μ . long., hyalinis continuis, intus granulosis.

Hab. in foliis vivis Gœppertiae hirsutæ, *Phœangellæ sociæ* P. Henn. intermixta, in Brasilia. — A *Phyll. sociæ*, *Ph. opposita* P. Henn. et *Ph. huallagensi* P. Henn. diversa.

21. *Phyllachora vernicosa* Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 26. — 4737 Stromatibus innatis determinatis repando-angulosis extus nigris ad epiphyllum præcipue nitidissimis, intus albidis, majusculis 3-10 mm. diam.; loculis stromate intus albido immersis, ad hypophyllum minute ostiolato-pertusis, globosis 120-150 μ . diam.; ascis e fusioideo subclavulatis, apice obtuse rotundatis, deorsum cuneatis atque in pedicellum breviusculum attenuatis, 60-70 \times 12-14, paraphysibus filiformibus sat numerosis circumdatis; sporidiis rectis v. oblique mono- v. distichis ellipsoideis 10-12 \times 5-6, grosse biguttulatis v. diblastibus, hyalinis.

Hab. ad folia viva coriacea arboris ignotæ (Lauraceæ?) cujusdam in Horto botanico Sao Paulo, Brasilia (USTERT). — Var. *papulosa* Spegazz., l. c. — A typo recedit stromatibus minus vernicosis et ad hypophyllum, ob loculos prominulos, minute papu-

losis; ascis 50-60 \times 16 et sporidiis 12-13 \times 8-9 fere ut in typo. — Cum specie.

22. *Phyllachora parvula* Speg., Fungi Paulist., Rev. Mus. La Plata 4738 t. XV, p. 24. — Maculis nullis; stromatibus innatis, amphigenis minutis, 0,5-1,5 mm. diam., angulosis, ad hypophyllum 1-4 bullosis, nigris, subopacis, sparsis v. rarius hinc inde gregariis; loculis astomis, hypophyllis, papuloso-prominulis, globoso-sublenticularibus 120-150 μ . diam., nucleo albo farctis; ascis apice truncato-rotundatis deorsum leniter incrassatulis, basi cuneatis brevissime pedicellatis, 85-100 \times 10-14, plus minusve paraphysatis; sporidiis utrinque acutiuscule rotundatis, rectis, 16-18 \times 5-6, levissimis, bi-guttulatis, hyalinis.

Hab. ad folia viva v. languida Lauraceæ? cujusdam, Morca perto de Sao Paulo, Brasilia (USTERT). — Species *Ph. sociæ* P. Henn. affinis sed certe distincta præcipue defectu macularum.

23. *Phyllachora Litseæ* Koord., Botan. Untersuch. (1907) pag. 181, 4739 fig. 14 (13-15). — Stromatibus, crustaceis, atris, innato-erumpentibus, pulvinatis, sparsis, 0,5-1,5 mm. diam., orbicularibus vel irregularibus, amphigenis; loculis immersis vix ostiolatis; ascis paraphysatis, cylindraceutis, apice rotundatis, 100-110 \times 10-11, 8-sporis; sporidiis ellipsoideis v. oblongis, utrinque rotundatis, continuis, hyalinis, 12-13 \times 6-8; paraphysibus ascos æquantibus.

Hab. in foliis Litseæ polyanthæ prope Penunggalan, Java (KOORDEERS).

24. *Phyllachora lepida* Syd., Ann. Mycol. VIII (1910) pag. 38. — 4740 Maculis nullis v. indistinctis flavidis; stromatibus epiphyllis, in hypophyllo etiam perspicuis, sparsis v. hinc inde subgregariis, rotundatis, $\frac{3}{4}$ -1 mm. diam., convexis, atris, nitidis, loculum tantum unicum majusculum ostiolo distincto rotundato minuto præditum includentibus; ascis cylindraceuto-clavatis vel clavatis, 110-140 \times 14-24, octosporis, paraphysatis; sporidiis oblongis, apice rotundatis, alterum finem versus plerumque leniter attenuatis sed obtusis, hyalinis, continuis, 24-32 \times 7-9.

Hab. in foliis Litseæ, Dumaguete in Cuernos Mts. prov. Negros or. in ins. Negros, Philippin. (A. D. E. ELMER). — A *Phyll. Laurinearum* Rac. distincta.

25. *Phyllachora nectandricola* Speg., An. Mus. Nac. Buenos Aires 4741 t. XIX (1909) p. 418. — Stromatibus amphigenis sæpius lenticularibus, prominulis, 200-400 μ . diam., plerumque 1-ocularibus, nitidulis; ascis subcylindraceutis basi breviter crassiusculeque pedi-

cellatis, $100 \approx 15-18$, octosporis, aparaphysatis; sporidiis oblique mono- v. distichis, ellipsoideis utrinque acutis, $15 \approx 7-9$, eguttulatis, hyalinis.

Hab. ad folia *Nectandrae* cujusdam in silva Robadal, Jujuy Argentina, America austr.

26. *Phyllachora Noackii* Syd., Ann. Mycol. V (1907) p. 359. — Stro- 4742
matibus epiphyllis, sine maculis, sparsis, rotundatis, $\frac{1}{2}-1$ mm. diam., convexis, atris, parum nitentibus, intus 1-plurilocularibus; ascis cylindraceutis, ca. $85 \approx 10$; sporidiis octonis, oblique monostichis, ellipsoideis, continuis, hyalinis, utrinque rotundatis, intus minute granulosis, $12-15 \approx 8-10$.

Hab. in foliis *Compositæ* cujusdam (*Baccharidis*? spec.) Prov. Sao Paulo, Sao Francisco dos Campos, Brasilia.

27. *Phyllachora conspicua* Ferd. et Winge, Botanisk Tidsskrift, XXIX 4743
(1908) p. 19, tab. II, fig. 8. — Stromatibus matrici innatis, primo plus minusve orbicularibus, minutis, discretis, mox autem dense aggregatis irregulariterque confluentibus v. crustam conspicuam, usque $1\frac{1}{2}$ cm. diam. formantibus, atris, initio epiphyllis, dein amphigenis, maculis orbicularibus flavis insidentibus easque pæne explentibus; loculis globosis, subglobosis v. applanatis, $150-180 \mu$. diam., mesophyllo immersis, ostiolo longo, non prominulo præditis; ascis cito diffluentibus, cylindraceutis, cylindraceuto-subfusoides v. oblongo-ellipsoideis, apice obtuse rotundatis, postice pedicello brevi et tenui, $80-115 \approx 15-18$; sporidiis octonis, oblique monostichis v. subdistichis (in ascis subellipsoideis fere conglobatis), oblongo-ellipsoideis, utrinque rotundatis, $19-22 \approx 6,5-8$, continuis, hyalinis, oleoso-farctis; paraphysibus filiformibus.

Hab. ad folia viva *Jacquinie armillaris* ad Coral Bay in insula St. Jan Indiæ occ. (RAUNKIAER).

28. *Phyllachora Jacquinie* Rehm, in Kellerman Journ. of Mycol. 4744
XIV (1908) p. 4. — Stromatibus totum folium occupantibus, gregariis, in utraque pagina conspicuis, in epiphyllis magis prominentibus, in hypophyllo tenuissime valvatim cinctis, semiglobosis v. oblongis, atris, $0,3-0,6$ mm. diam., loculos globulosos $1-3$ minimos, haud perspicue ostiolatos includentibus; ascis cylindraceutis, apice rotundatis, $100 \approx 14-18$, 8-sporis; sporidiis ellipsoideis, utrinque rotundatis, glabris, hyalinis, 1-locularibus, strato mucoso tenuissimo obtuctis, $14-15 \approx 8-9$, 1-raro 2-stichis; paraphysibus filiformibus, septatis, $2-3 \mu$. cr.

Hab. ad folia *Jacquinia aurantiacæ*, Jalapa Guatemala (KELLERMAN).

29. *Phyllachora Ardisiæ* P. Henn., Hedwigia XLVII (1908) p. 254. 47
— Maculis fuscis, rotundatis v. confluentibus effusis, stromatibus epiphyllis, rotundato- v. oblongo-pulvinatis, atris, subnitentibus, loculis immersis numerosis vix ostiolatis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 65-80 \times 8-10; sporidiis oblongis, obtusis, nubilosus, hyalinis, 8-12 \times 5-6.

Hab. in foliis *Ardisiæ Candolleanae*, Luzon Prov. Benguet, Daklanto Kabayan Ins. Philippin. (MERRILL).

30. *Phyllachora ambrosicola* Speg., Ann. Mus. Nac. Buenos Aires 474 t. XIX (1909) p. 414. — Maculis nullis v. obsoletissimis, palléscentibus indeterminatis; stromatibus amphigenis innato-lenticularibus 200-300 μ . diam., 1-locularibus, atris, nitidulis; ascis subcylindræis sæpius subtorulosi basi breviter crasseque stipitatis, 80-120 \times 10-16, non v. parce paraphysatis; sporidiis oblique vel transverse monostichis, utrinque obtusissimis, 12-14 \times 8-9, medio non v. grosse 1-2-guttulatis, hyalinis.

Hab. ad folia viva *Ambrosiæ tenuifoliæ*, Marmol propé Buenos Aires Argentina Amer. austr. — An *Ph. Ambrosiæ* (B. et C.) Sacc.? Species ad *Physalosporam* notis plurimis vergit.

31. *Phyllachora Macarangæ* P. Henn., Hedwigia XLVII (1908) p. 254. 474
— Maculis angulato-rotundatis v. effusis, fuscis; stromatibus epiphyllis gregariis, rotundato- vel oblongo-angulatis, pulvinatis, atro-subnitentibus; loculis immersis, sobglobosis, ostiolis, subpunctiformibus; ascis clavatis, vertice obtusis, 8-sporis, 50-70 \times 10-14; paraphysibus filiformibus, hyalinis guttulatis, 2 μ . crassis; sporidiis monostichis v. distichis, oblongis, obtusis, hyalinis, 10-15 \times 5-6.

Hab. in foliis *Macarangæ*, Balut Ins. Philippin. (MERRILL).

32. *Phyllachora Randiæ* Rehm — Syll. XIV p. 667 — subsp. *Aculeatæ* Ferd. et Winge, Bot. Tidsskr. XXIX (1908) p. 19; Vidensk. Meddel. fra den naturh. Foren. Kiøbenhavn (1908) p. 142, t. IV, fig. 2. — Stromatibus fere solum epiphyllis, innatis, planiusculis, atris, nitidis, nunc minutis, nunc majoribus, ad 3 mm. diam., pustulas loculigeras $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., vario secundum magnitudinem stromatis numero (max. 20-30), gerentibus; loculis in pustula singula 1-2, in epidermide vix mutata insidentibus, superne strato nigerrimo subcuticulari limitatis; ascis cylindræo-obovoideis, clavatis, ovoideis, omnino versiformibus, 40-60 \times 15-20; sporidiis oblongo-ellipsoideis, 12-13 \times 7-8. 474b

Hab. ad folia viva Randiæ aculeatæ in insula St. Jan Indiae occidentalis (F. BOERGESEN). — Adsunt pycnidia ad typum *Placosphaeriæ* formata, nunc stromatibus minutis propriis immersa, nunc peritheciis intermixta, sporulas bacillares, subrectas, continuas, hyalinas, $5-8 \times \frac{1}{2}-\frac{3}{4}$ foventia.

33. *Phyllachora phyllanthophila* P. Henn. — Syll. XVII, p. 834 — 4749

var. *egregia* Rehm, Ascom. exsicc. fasc. 46, n. 1895, Ann. Mycol. (1907) p. 530 et (1910) p. 302. — Distinguitur stromatibus majoribus plerumque oblongis subobtusis, usque ad 4 mm. long., 2-3 mm. latis; loculis innatis 20-35, plus minus prominentibus, poro perspicuo pertusis, monostichis; sporidiis 12-13 \times 7-9, strato mucoso obvolutis, distichis; ascis clavatis, 50-60 \times 20.

Hab. in pagina sup. foliorum ? *Phyllanthi*, Sao Leopoldo, Rio Grande do Sul Brasiliæ (RICK).

34. *Phyllachora globispora* Speg., An. Mus. Nac. Buenos Aires t. XIX 4750

(1909) p. 418. — Stromatibus amphigenis sed sæpius epiphyllis innatis, lenticularibus, 450-750 μ . diam., atris, nitentibus, loculis 1-3 subglobosis 200-250 μ . diam.; ascis cylindræis breviter pedicellatis 75-100 \times 10-12, parce paraphysatis; sporidiis sæpius geminatis, monostichis globosis, 10 μ . d., levibus, grosse 1-guttulatis.

Hab. ad folia Crotonis cujusdam in silvis prope Bompland, Misiones, Argentina America austr. — Specie ab omnibus in *Euphorbiaceis* et præcipue in *Crotonibus* vigentibus longissime recedens.

35. *Phyllachora Blanquillo* Speg., An. Mus. Nac. Buenos Aires t. XIX 4751

(1909) p. 414. — Maculis amphigenis fuscescentibus, irregularibus; stromatibus lenticularibus 150-200 μ . diam., innato-prominulis nitidulis nigris; loculis sæpius in quoque stromate solitariis 120-150 μ . diam.; ascis cylindræo-fusoideis basi breviter crasseque pedicellatis 60-75 \times 10-15, parcissime paraphysatis, octosporis; sporidiis ex elliptico subovoideis, oblique v. transverse monostichis, utrinque obtusis 10-14 \times 7-8, eguttulatis, hyalinis.

Hab. ad folia viva *Excoecariæ marginatæ* prope Concepcion del Uruguay Amer. austr. (J. M. HUERGO).

36. *Phyllachora Fici-obscuræ* Koord., Botan. Untersuch., (1907) p. 181. 4752

— Stromatibus crustaceis, atris, discretis, sparsis, pulvinatis, orbicularibus, amphigenis, imprimis epiphyllis, innatis 0,3-0,8 mm. diam.; loculis immersis vix ostiolatis; ascis cylindræis, paraphysatis, octosporis, apice rotundatis 88-90 \times 10-12; sporidiis globosis, continuis, hyalinis 10-14 \times 10-11, uniseriatis.

Hab. in foliis vivis Fici obscuræ prope Purworedjo Java
(KOORDERS).

37. *Phyllachora Fici-minahassæ* P. Henn., Hedwigia XLVII (1908) 4753 p. 254. — Maculis nullis; stromatibus epiphyllis sparsis v. gregarie confluentibus, atro-carbonaceis, opacis v. subnitentibus angulato-pulvinatis; ascis clavatis, obtusis, 8-sporis, paraphysatis, 45-60 \times 10-16; sporidiis oblongis utrinque obtusis, intus guttulatis, hyalinis, 13-16 \times 5-6,5.

Hab. in foliis Fici minahassæ, Balut Island Ins. Philippin.
(MERRILL).

38. *Phyllachora Fici-fulvæ* Koord., Botan. Untersuch., (1907) p. 182. 4754 — Stromatibus crustaceis, epiphyllis, atris innato-erumpentibus, 1-1,5 mm. diam., sparsis, circularibus, pulvinatis; ascis cylindraceis 60-80 \times 8-11 apice rotundatis; sporidiis continuis, hyalinis, globosis v. ellipsoideis et utrinque rotundatis, 10-11,5 \times 8-11, uniseriatis.

Hab. in foliis Fici fulvæ prope Sapuran Java (KOORDERS).

39. *Phyllachora Fici-albæ* Koord., Botan. Untersuch. (1907) p. 183. 4755 — Stromatibus crustaceis, atris, epiphyllis, innatis, haud erumpentibus, discretis, pulvinatis, suborbicularibus v. irregularibus, 2-4 mm. diam.; loculis numerosis vix ostiolatis; ascis cylindraceis, paraphysatis, 70-75 \times 10-10,5 apice haud incrassatis, octosporis; sporidiis uniseriatis, continuis, hyalinis, globosis v. ellipsoideoglobosis, 8-10 \times 8-9.

Hab. in foliis vivis Fici albæ in M. Sendoro prope Kledung Java (KOORDERS).

40. *Phyllachora Devriesei* Koord., Botan. Untersuch. (1907) p. 181. 4756 fig. 14 (7-12). — Stromatibus crustaceis, atris, innatis, 0,8-1,2 mm. diam., sparsis, suborbicularibus, pulvinatis, hypophyllis; loculis immersis, minute ostiolatis; ascis cylindraceis, paraphysatis, 8-sporis, apice rotundatis, 60-80 \times 10-12; sporidiis continuis, hyalinis, subglobosis vel ellipsoideis et utrinque rotundatis, 10-12 \times 7-8,5; paraphysibus filiformibus, 100 \times 3-4, hyalinis.

Hab. in foliis Fici leucantatomæ prope Sadang prov. Kedu Java (KOORDERS).

41. *Phyllachora amaniensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4757 p. 113. — Stromatibus in maculis fuscidulis sparse gregariis, hypophyllis, planis, atris, ostiolato-verrucosis, c. 1-1,5 mm. diam.; loculis immersis, subglobosis v. ovoideis; ascis cylindraceis apice rotundato-obtusis, octosporis, 100-130 \times 7-10; paraphysibus filifor-

mibus, hyalinis c. 2 μ . cr.; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, interdum inæquilateralibus, intus granulatis, hyalinis, continuis, 10-14 \times 6-7.

Hab. in foliis Fici spec., Ost-Usambara Africæ centr. (ZIMMERMAN).

42. **Phyllachora Merrillii** Ricker, A List Philipp. Fungi in Philipp. 4758

Journ. of Science, I, Suppl. IV (1906) pag. 280. — Stromatibus gregariis, confluentibus, epiphyllis, convexis, nigris, nitidis, 6 mm. diam., in maculis flavidis insidentibus; ascis cylindræo-clavatis, 56-65 \times 14-20, breviter stipitatis, octosporis; sporidiis oblique uniseriatis vel sæpe partim biseriatis vel imbricatis, ellipsoideis, uniseptatis, primum hyalinis, dein brunneolis, 8-12 \times 4-6; paraphysibus minutis, filiformibus.

Hab. in foliis Fici, Mindoro, Bulalacao in ins. Philippinens. (MERRILL).

43. **Phyllachora dendroidea** P. Henn., in Rehm Ascom. Exsicc. fasc. 42 4759 (1908) n. 1787; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).

Hab. in Fico sp. Pará Brasilæ (C. F. BAKER).

44. **Phyllachora circinata** Syd., Ann. Mycol. VIII (1910) p. 38. — 4760

Stromatibus, sine maculis, plerumque epiphyllis, rarius etiam hypophyllis, in greges orbiculares $\frac{1}{2}$ -1 cm. latos amœne circinatim dispositis, minutis, rotundatis, 0,5-1 mm. diam., atris, loculis compluribus minutis præditis; ascis clavatis, 42-60 \times 12-15, octosporis; sporidiis irregulariter distichis, oblongis, utrinque obtusis, continuis, hyalinis, 14-18 \times 5-6.

Hab. in foliis Fici sp. (cum foliis magnis glabris integris), Prov. of Cagayan Luzon ins. Philippinenses (H. M. CURRAN).

45. **Phyllachora simplex** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4761

Arkiv f. Bot. Bd. V (1905) p. 14, fig. 10. — Stromatibus minutissimis, non maculiformibus, ad utramque paginam foliis dispersis, solitariis et uni-bilocularibus, rarissime confluentibus, multilocularibus, lenticulariter perithecioides, nitidiusculis, nigris, $\frac{1}{3}$ -1 mm. diam.; pycnidiis epiphyllis, numerosis, dense sparsis, interdum aggregatis vel nonnullis confertulis, ostiolo pertuso, applanato erumpentibus, circa 150 μ . diam.; sporulis bacillaribus, utrinque acutiusculis, curvatis, interdum genuflexis, 17,7-21,5 \times 1,5-2; ascis octosporis, valde variis, plerumque fusoideis, medio latissimis, interdum obovatis vel fere cylindræo-clavatis, superne incrassatis, 90-115 \times 19-24 (p. sp.); sporidiis conglobatis, ellipsoideis, utrinque rotundatis vel fere truncatulis, medio interdum incurva-

tis, vel ovato-piriformibus, inferne acutatis vel late ellipsoideis, fere sphaerioides, $15,2 \times 10$ vel $19-25 \times 7-8$; paraphysibus hyalinis filiformibus, ascos superantibus.

Hab. in foliis Coccolobæ, Asuncion Paraguay (MALME). — Species ascis sporidiisque valde variantibus distincta videtur, ad *Physalosporam* nonnihil accedens, sed a *Phys. Coccolobæ* Rehm plane divergens.

46. *Phyllachora Coccolobæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4762 (1909) p. 416. — Stromatibus innatis nigris parvis repando-angulosis gregariis utrinque manifestis sed hypophyllis, plurilocularibus, loculis subglobosis $100-120 \mu$ diam.; ascis primo cylindraceis dein torulosi basi breviter crasseque pedicellatis, $70-80 \times 10-18$, octosporis, paraphysatis; sporidiis ellipsoideis, sæpius transverse monostichis utrinque obtusiusculis $13-14 \times 6$, hyalinis.

Hab. ad folia viva Coccolobæ ejusdam in silvis prope Formosa, Argentina America austr.

47. *Phyllachora vilis* Starb., Ascom. Schwed. Chaco-Cordill. Exped., 4768 Arkiv f. Bot. Bd. V (1905) p. 14. — Stromatibus minutissimis, secundum folium filiforme sparsis, interdum confluentibus, elongatis, $0,2-0,3$ mm. longis, vix $0,1$ mm. latis; loculis paucis, vix prominulis, ostiolo pertusis, minimis; ascis cylindraceis, vel attenuato-fusiformibus, sursum obtuse rotundatis, vix pedicellatis, $50-63 \times 10-12$; sporidiis octonis, inordinatim distichis, semper utrinque acutatis, plerumque clavulatis, inferne longe attenuatis, interdum fusoides, e medio lato mox acutatis, guttulatis, $18-20 \times 5$; paraphysibus filiformibus, robustis, flexuosis, ascos obvallantibus.

Hab. in foliis Bulbostylis capillaris, Minao Geraes, S. Joao del Rey (LINDMAN). — *P. oxysporæ* Starb. affinis.

48. *Phyllachora melanoplaca* (Desm.) Sacc. — Syll. II, p. 607. — 4764 fm. Veratri Rehm, Ascom. Exsicc. fasc. 37, n. 1661, Ann. Mycol. IV (1906) p. 407.

Hab. in foliis Veratri nigri, prope Konstanzer Hütte, Arlberg Tyrolia, 1770 m. alt.

49. *Phyllachora Pappiana* Bacc., Funghi Eritr., Ann. Bot. IV (1906) 4765 pag. 275. — Stromatibus amphigenis, minutis, subrotundis, atris, diu epidermide tectis; loculis paucis, 200μ latis; ascis paraphysatis 90×10 ; sporidiis hyalinis, continuis, 22×9 .

Hab. in foliis Sansevieræ Ehrenbergianæ in montibus Arbaroba a Mahdet, 2200 m. alt. in Erythræa (PAPP).

- 50 *Phyllachora cyperina* P. Henn., Fl. du Bas- et Moy.-Congo, in 4766]

Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Maculis fuscois oblongis; stromatibus amphigenis, oblongis, atris nitentibus, loculis immersis rotundato-angulatis c. 50-100 μ . cr.; ascis longe fuscoideis, subacutiusculis, 8-sporis, 60-80 \times 6; sporidiis oblique monostichis vel subdistichis, lanceolato-fuscoideis, hyalinis, 10-14 \times 3,5-4,5.

Hab. in foliis Cyperaceæ cujusdam, Congo Afric. trop. (VANDERYST).

51. *Phyllachora fimbristylicola* Speg., An. Mus. Nac. Buenos Aires 4767 t. XIX (1909) p. 417. — Stromatibus innatis nigris nitidulis, linearibus v. elliptico-linearibus, 0,5-1 mm. long., 0,2-0,3 mm. latis; loculis confertis 150 μ . diam.; ascis e cylindraceo subfuscoideis, basi breviter pedicellatis, 55-60 \times 8-10, paraphysatis octosporis; sporidiis distichis subfuscoideis utrinque acutis 14-20 \times 4-6, hyalinis.

Hab. ad folia culmosque Fimbristylidis capillaris prope Rufino et prope Corrientes, Argentina Amer. austr. — A *Phyll. Fimbristylidis* (B et Br.) Sacc. ascis non clavatis sporidiisque non monostichis nec curvulis atque paullo crassioribus recedens; *Ph. gracillimæ* Speg. etiam peraffinis sed certe distincta.

52. *Phyllachora Sacchari-ægyptiaci* Br. et Cavr., Funghi parass. ess. 4768 n. 416 cum iconibus. — Stromatibus oblongis, seriatim dispositis, confluentibusque, diu epidermide rubefacta tactis; loculis uniseriatis, stromate dense immersis, mutua pressione e globoso irregularibus; ascis cylindraceis, modice pedicellatis, 145-155 \times 12-14, paraphysibus filiformibus, longioribus obvallatis, octosporis; sporidiis oblique monostichis ellipsoideis v. ovoideis, dilute flavescentibus, 19-20 \times 7,5-9,5, episporio levi.

Hab. in foliis Sacchari ægyptiaci in arenosis salsis Siciliæ et in horto botanico, Catania (CAVARA).

53. *Phyllachora melicicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4769 (1909) p. 417. — Stromatibus amphigenis ellipticis, nigris non v. vix prominulis 1-2 mm. long., 0,5-0,8 mm. lat.; loculis numerosis subglobosis 150-180 μ . diam.; ascis linearibus modice pedicellatis, 120-130 \times 10, octosporis, paraphysibus filiformibus commixtis; sporidiis oblique monostichis ellipsoideis, utrinque obtusissime rotundatis, 14-16 \times 8, non v. grosse 1-guttulatis, hyalinis.

Hab. ad folia Melicæ violaceæ prope Jujuy, Argentina America austr.

54. *Phyllachora Eriochloæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4770 (1909) p. 416. — Stromatibus matrice tota pallescente insidenti-

bus, lenticularibus vel confluendo linearibus 250-1000 \times 200-250, 1-3-locularibus, loculis totis immersis 100-120 μ . diam.; ascis linearibus basi cuneatis breviterque pedicellatis, 70-80 \times 10-12, parce paraphysatis octosporis; sporidiis oblique monostichis, ellipsoideo-oboovatis, 14-15 \times 7, hyalinis.

Hab. ad folia viva *Eriochloæ* annulatæ prope Santiago del Estero Argentina Amer. austr.

55. *Phyllachora boutelouicola* Spegazz., An. Mus. Nac. Buenos Aires 4771 t. XIX (1909) pag. 415. — Stromatibus amphigenis subellipticis opacis, 1-5 mm. long., 1-1,25 mm. lat.; loculis immersis globulosis 120-150 μ . diam., constipatis albo-farctis; ascis subcylindraceis basi modice attenuato-pedicellatis 80-90 \times 12-15, paraphysatis, octosporis; sporidiis oblique v. transverse monostichis, ovoideis, 12-13 \times 6, eguttulatis hyalinis.

Hab. ad folia viva *Boutelouæ* lophostachyæ prope San Luis, Argentina Amer. austr.

56. *Phyllachora cenchricola* Spegazz., An. Mus. Nac. Buenos Aires 4772 t. XIX (1909) p. 415. — Maculis nullis sed folio omnino pallescente; stromatibus epiphyllis innatis, minutis opacis, sublinearibus, 0,5-1,5 mm. long., 0,25-0,40 mm. lat., non nitentibus; loculis 1-8 in quoque stromate 100-220 μ . diam.; ascis subfusoides basi brevissime crassiusculeque pedicellatis 80-90 \times 12-16, paraphysibus filiformibus densis cinctis, octosporis; sporidiis late ellipsoideis utrinque rotundatis mono- v. distichis, 15 \times 10, eguttulatis.

Hab. ad folia viva *Cenchri* myosuroidis prope Metan, Salta, Argentina Amer. austr.

57. *Phyllachora chloridicola* Spegazz., An. Mus. Nac. Buenos Aires 4773 t. XIX (1909) p. 416. — Stromatibus innatis suborbicularibus 1-2 mm. diam., nitidulis, plurilocularibus, loculis 120-150 μ . diam.; ascis linearibus basi breviter pedicellatis, 85-100 \times 8-10, paraphysatis, octosporis; sporidiis ellipsoideis monostichis plus minusve obtusatis, 10-12 \times 5-7 v. 14-16 \times 7-8, hyalinis.

Hab. ad folia viva *Chloridis* radiatæ, La Rioja, Chlor. distichophyllæ, Cordoba, Argentina Amer. austr.

58. *Phyllachora Urvilleana* Spegazz., An. Mus. Nac. Buenos Aires 4774 t. XIX (1909) p. 419. — Stromatibus innatis hypophyllis fuscis numerosissimis sublinearibus confluentibus, loculis 120-150 μ . diam. ostiolo lato, 20 μ . diam., præditis; ascis obclavatulis basi lenissime crassiusculeque pedicellatis 60-70 \times 7-8, octosporis, parcissime pa-

raphysatis; sporidiis subfusoides utrinque acutis, 18-20 \times 4, oblique distichis, eguttulatis, hyalinis.

Hab. ad folia *Panici Urvilleani*, Fuente Argentina prope Bahía Blanca, Argentina Amer. austr.

59. *Phyllachora bokensis* P. Henn., in Fl. du Bas- et Moy.-Congo, 4775 v. II, fasc. III (1908) p. 226. — Maculis amphigenis, oblongo-effusis, fuscidulis v. violascentibus; stromatibus amphigenis oblongis striiformiter confluentibus, atro-opacis; loculis subsphæroideis, punctoideo-ostiolatis; ascis clavatis, vertice obtusis, 8-sporis, paraphysatis, 80-110 \times 16-20; sporidiis oblique monostichis vel subdistichis, ellipsoideis v. ovoideis, obtusis, intus granulosis, hyalinis, 15-20 \times 9-13.

Hab. in foliis *Panici*, Boko Sainte-Barbe Congo (VANDERYST).

60. *Phyllachora heterospora* P. Henn., Etat indép. du Congo Mis- 4776 sion E. Laurent fasc. IV (1907) p. 362. — Maculis gregariis flavidis v. obsoletis; stromatibus amphigenis pulvinato-oblongis sæpe confluentibus, atro-nitentibus; loculis immersis globulosis; ascis fusoides-clavatis, obtusis v. acutiusculis, octosporis, paraphysatis, 50-80 \times 10-15; sporidiis distichis, interdum submonostichis, versiformibus, ellipsoideis, ovoideis v. fusoides, hyalinis, 10-18 \times 6-8.

Hab. in foliis *Panici maximi* inter Léopoldville et Kwa-mouth, Africa æquator.

61. *Phyllachora acuminata* Starb., Ascom. Schwed. Chaco-Cordill. 4777 Exp., Arkiv f. Bot. Bd. V (1905) p. 11, fig. 8a-b. — Stromatibus epidermide nigrificata tectis, epiphyllis vel amphigenis, gregatim sparsis, interdum confluentibus, oblongatis, varie determinatis, applanatis depressis; loculis non prominulis, lenticularibus, fere confluentibus; ascis octosporis, cylindræis, sæpe curvatis, deorsum paullo angustioribus in pedicellum sensim attenuatis, sursum obtusis, fere deciduis, 100-140 \times 9-10; sporidiis recte, interdum oblique monostichis, oviformibus, sursum rotundatis, deorsum cuspidato-acuminatis, hyalinis, 14-17,7 \times 5-6,5; paraphysibus hyalinis, fere simplicibus, filiformibus, elegantissime flexuosis; stromatibus minoribus pycnidicis ellipticis, $\frac{1}{4}$ -1 mm. longis, dimidio latis; sporulis clavulatis acicularibus, sæpissime curvulis, 12-20 \times 1.

Hab. in foliis vivis *Paspali*, Salta, Argentina. — *P. oxyspora* Starb. affinis; et ab illa et a *P. Cyperi* v. *Donacis* Berl. et Sacc. sporidiis latoribus, cuspidatis differt.

62. *Phyllachora Oplismeni* Syd., Ann. Mycol. V (1907) pag. 339. — 4778 Stromatibus amphigenis, irregulariter distributis, subinde seriatim

dispositis et parum confluentibus, sæpe autem per tota folia æque sparsis, minutis, punctiformibus, rotundatis v. oblongis, ca $\frac{1}{2}$ mm. longis, atris, parum nitentibus, 1- vel pauci-ocularibus; ascis cylindraceis, breviter stipitatis, octosporis, 38-45 \times 6-11; sporidiis oblique monostichis v. subdistichis, continuis, ovatis, utrinque obtusis, hyalinis vel subhyalinis, 9-11 \times 4 $\frac{1}{2}$ -6.

Hab. in foliis *Oplismeni undulatifolii*, Tokyo Japoniæ (N. NAMBU). — Probabiliter *Phyll. Arthraxonis* proxima.

63. *Phyllachora Sorghi* v. Höhn., Fragm. z. Mykol. VII (1909) in Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 844 et in Rehm Ascom. exs. n. 1841, Ann. Mycol. VII (1909) p. 403 (nomen nudum). — Stromatibus amphigenis utrinque visibilibus, sine maculis v. in maculis pallide flavidis rubro-sanguineo marginatis insidentibus, plerumque longitudinaliter seriatis, elongatis, 0,5-1 mm. latis, sæpe confluentibus et usque ad 1-2 cm. longis, carbonaceis, nitidulis, undulato-asperulis; loculis longitudinaliter seriatis, depressis, distincte limitatis, 150-830 μ . long., 100-150 μ . cr.; ostiolis distinctis, rotundatis 40-50 μ . latis; paraphysibus numerosis, late cylindraceis, 6-7 μ . latis, mucosis; ascis clavatis, sessilibus vel breviter stipitatis, octosporis, 90-130 \times 13-20; sporidiis mono- v. distichis, hyalinis, tenuiter tunicatis, contentu granuloso, unilocularibus, utrinque rotundatis, ellipsoideo-ovoides, 18-24 \times 12.

Hab. in foliis *Sorghi vulgaris* in Horto bot. Buitenzorg in ins. Java. — *Phyll. Sacchari* P. Henn. affinis.

64. *Phyllachora paspalicola* P. Henn., in Rehm Ascomyc. Exsicc. 4780 fasc. 42 (1908) n. 1785; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).

Hab. in *Paspalo* sp., Pará Brasiliæ (C. F. BAKER).

65. *Phyllachora Eleusines* P. Henn., in Fl. du Bas- et Moy.-Congo, 4781 Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Stromatibus amphigenis, sparse gregariis, rotundato- vel oblongo-pulvinatis, atris, nitentibus, c. 0,5-0,7 mm. cr.; loculis immersis, paucis; ascis cylindraceis, obtusis, 8-sporis, 65-80 \times 6-7; paraphysibus filiformibus c. 1,5 μ . cr.; sporidiis oblique monostichis, ovoides vel ellipsoideo-fusiformibus, hyalinis, 8-10 \times 6-7.

Hab. in foliis *Eleusines indicæ*, Kisanu Congo (VANDERYST).

66. *Phyllachora Usteriana* Speg., Fungi Paulist., Rev. Mus. La Plata 4782 t. XV (1908) p. 25, fig. F. — Maculis nullis; stromatibus parenchymate innatis epidermide adnato-tectis, vix prominulis, densius

scule subcircinantibus, pusillis 150-250 μ . diam., numquam confluentibus, loculis in quoque stromate solitariis, subglobosis 80-100 μ . diam., nucleo albo faretis; ascis utrinque attenuatis, apice acutiuscule rotundatis aparaphysatis v. parce pseudoparaphysatis, pedicello brevi suffultis, $60 \approx 12-15$, octosporis; sporidiis fusoidis rectis v. leniter inæquilateralibus, utrinque nodulo subgloboso ornatis $25-30 \approx 5-6$, continuis v. obsolete diblastis, hyalinis.

Hab. ad folia coriacea arboris ignotæ cujusdam prope Ipiranga Brasilia (USTERT).

67. *Phyllachora grammica* P. Henn., in Fl. du Bas- et Moy.-Congo, 4783 Ann. Mus. du Congo v. II, fasc. II (1907) pag. 98. — Maculis sparsis rotundato-angulatis, flavis; stromatibus amphigenis nervos sequentibus, linearibus ramosis, atris, subnitentibus; loculis immersis, subsphæroideis; ascis cylindræo-clavatis, obtusis, 8-sporis, $60-70 \approx 8-10$; sporidiis oblique monostichis v. subdistichis, oblongis v. ovoideis, utrinque rotundatis, hyalinis, 1-3-guttulatis, $8-12 \approx 6-7$.

Hab. in foliis indeterminatis, Kisantu Congo Africæ tropic. (VANDERYST).

EURYACHORA Fuck. — Syll. II p. 625, IX p. 1030, XIV p. 674, XVI p. 624, XVII p. 527.

1. *Euryachora duplicata* Rehm, Ann. Mycol. VII (1909) p. 538 — 4784

Stromatibusatrici innatis ab eaque denique denigrata tectis, convexulis, linearibus, ad apices rotundatis, 1-2 cm. longis, 2-4 mm. latis, intus atris, carbonaceis; loculis plurimis globulosis monostiche innatis, papillis minutissimis conspicuis; ascis cylindræis ϕ . $100 \approx 15$, octosporis; sporidiis ellipsoideis, unicellularibus, guttis duabus magnis oleosis instructis, hyalinis, $15-17 \approx 8-9$, monostichis; paraphysibus filiformibus.

Hab. ad ramulos Serjanicæ, Sao Leopoldo Rio Grande do Sul Brasilicæ (THEISSEN S. J.). — Socia adest *Phyllachora duplex*.

Sect. 3. Phæosporæ.

AUERSWALDIA Sacc. — Syll. II p. 626 et cfr. p. 461, IX p. 1031, XI p. 374, XIV p. 675, XVI p. 625, XVII p. 841.

1. *Auerswaldia Vignæ* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 113. 4785 — Maculis rotundato-angulatis, gregarie sparsis, roseolo-fusculis; stromatibus epiphyllis cæspitosis, rotundato-pulvinatis, atro-niten-

tibus, 250-300 μ . diam., 1-paucilocularibus; ascis clavatis vertice obtuse rotundatis, 50-80 \times 8-12, octosporis; paraphysibus filiformibus, hyalinis, c. 2 μ . cr.; sporidiis oblique monostichis v. subdistichis, ovoideis v. subglobosis, primo hyalinis dein roseo-fuscidulis, 7-9 \times 6-8.

Hab. in foliis Vignæ vexillatæ, Amani Ost-Usambara (ZIMMERMAN). — A typo generis stromatibus minutis recedit.

2. *Auerswaldia Dalbergiæ* P. Henn., Engl. Jahrb. XXXVIII (1905) 4786 p. 114. — Maculis flavido-fuscidulis, rotundato-angulatis v. effusis; stromatibus epiphyllis cæspitosis, pulvinato-erumpentibus, atro-nitentibus, punctulatis, c. 180-220 μ ., loculis paucis immersis; ascis clavatis, apice rotundatis, 4- (raro) 8-sporis, paraphysatis, 40-50 \times 7-10; sporidiis oblique monostichis v. subdistichis, ellipsoideis v. subovoideis; intus granulatis, olivaceo-fuscidulis, 8-11 \times 5-6.

Hab. in foliis Dalbergiæ lacteæ, Marangu Kilimandscharo Africae centr. (G. VOLKENS).

3. *Auerswaldia Derridis* P. Henn., Hedwigia XLVII (1908) p. 255. 4787 — Maculis rotundatis v. effusis brunneis; stromatibus amphidymis gregariis sæpe confluentibus, rotundatis, planis, atris, opacis, loculis immersis, subglobosis; ascis cylindraceis, obtusis, 8-sporis, p. sporif. 30-35 \times 5; sporidiis oblique monostichis, ellipsoideis, flavido-olivascentibus, 5-6 \times 4-4,5.

Hab. in foliis Derridis, Mindoro, Alag River ins. Philippin. (MERRILL).

4. *Auerswaldia Hirtellæ* P. Henn., Hedwigia XLVII (1908) p. 268. 4788 — Maculis flavo-fuscis rotundatis; stromatibus epiphyllis sparsis, erumpenti-superficialibus, pulvinato-subglobosis, rugosis, subcarbonaceis, atro-fuscis, rimosis; loculis immersis; ascis longe clavatis, vertice obtuso-rotundatis, 8-sporis, 100-140 μ . longis, parte spor. 70-100 \times 10-13; sporidiis ellipsoideis v. subfusoides, utrinque obtusis, oblique monostichis v. subdistichis, guttulatis, fuscis, 14-20 \times 8-10; paraphysibus hyalinis.

Hab. in foliis Hirtellæ, Serra do Sincora, Bahia Brasil.

5. *Auerswaldia Copelandi* Syd., Ann. Mycol. IV (1906) p. 343. — 4789 Stromatibus amphigenis, omnino immersis, phyllachoroideis, forma et magnitudine valde ludentibus, 2-15 mm. latis, nervis non limitatis sed eos transverse superantibus, atris, nitidis, carbonaceis; loculis in quoque stromate 1 vel pluribus (usque 20); ascis forma variabilibus, cylindraceis vel clavatis vel saccatis, ca. 70-90 \times 10-28; sporidiis octonis (an semper?), monostichis vel etiam irregulariter

distichis, subglobosis vel late ellipsoideis, continuis, ex hyalino brunneolis, 14-19 \approx 12-15.

Hab. in foliis Caryotæ, in regione Zamboanga, Mindanao, ins. Philippin. (E. B. COPELAND).

6. *Auerswaldia Merrillii* P. Henn., Hedwigia XLVII (1908) p. 255. — 4790

Maculis effusis, fuscidulis; stromatibus amphidymis, sparse gregariis, rotundatis, atro nitentibus, planiusculis, 1-1,5 mm. diam.; loculis immersis subglobulosis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 140-180 \approx 10-13; sporidiis longe fusoides, utrinque subacutis v. subpapillato-hyalinis, guttulatis, subfuligineis, 30-42 \approx 8-10.

Hab. in foliis Freycinetiæ, Mindoro, Mt. Halcon, ins. Philippin. (MERRILL).

SPHÆRODOTHIS Shear, Mycologia v. I (1909) p. 162, *Auerswaldiæ* subg. *Sphærodothis* Sacc. et Syd. — Syll. XVI, p. 625.

1. *Sphærodothis Neowashingtoniæ* Shear, l. c. p. 162. — Stromatibus 4791

amphigenis, numerosis, sparsis, subellipticis, irregulariter depressis et subcollabentibus, nigris, nitidis, minute punctatis, 3-8 mm. long. sæpe macula flavo-brunnea insidentibus; loculis numerosis, minutis, ovato-oblongis, ostiolis paucis v. nullis umbilicatis; ascis fugacibus globosis v. subglobosis, subsessilibus, octosporis, 100-120 μ . diam.; paraphysibus?; sporidiis oblongo-ellipsoideis, levibus, subcompressis, subsulcatis, initio strato mucoso hyalino obvolutis, dein nudis, et saturate castaneo-brunneis, 56-68 \approx 30-36.

Hab. in foliis Neowashingtoniæ filamentosæ, National City California. — Quoad alias *Auerswaldiæ* species huc ducendæ cfr. Shear l. c.

Sect. 4. Hyalodidymæ.

PLOWRIGHTIA Sacc. — Syll. II p. 635, IX p. 1041, XI p. 376, XIV p. 680, XVI p. 628, XVII p. 845.

1. *Plowrightia neo-mexicana* Earle, Bull. of the N. York Bot. Gard. 4792

(1904) p. 291. — Stromatibus primum infossis, mox erumpenti-superficialibus, nigris, rugulosis, tenuibus, crustaceis, orbicularibus v. sæpe ovoideis, 0,5 mm. circ. diam., plerumque confluenti-aggregatis et tunc plus minusve elongatis et usque ad 3 mm. diam.; loculis 6-12 vel ultra in quoque stromate, parvis, confertis, intus albis, superficiem leniter inflantibus, ostiolo obscuro; ascis ellipsoi-

deo-oblongis, breviter pedicellatis, aparaphysatis, circ. $60 \approx 14$; sporidiis distichis, hyalinis, ovoideis, inæqualiter uniseptatis, fortiter constrictis, $20-22 \approx 7-10$, cellula minori plerumque $9 \approx 7$.

Hab. in ramis emortuis *Ampelopsidis* quinquefoliæ, inter San Ignacio et Las Vegas, New Mexico (T. D. A. COCKE-RELL).

2. *Plowrightia placida* Sydow, Deutsche Zentral-Afrika Exped. (1907- 4793 1908) II Bd. p. 99. — Stromatibus epiphyllis, dense sparsis, maculis nullis, sub epidermide ortis, erumpentibus et tandem subsuperficialibus, applanato-globosis, basi coarctatis, plerumque centro tantum matriçi insidentibus, atris, 200-300 μ . diam., superficie ob loculos paucos prominulos rugosis, loculis c. 3-8 in quoque stromate; ascis clavatis v. anguste saccatis, apice rotundatis, leniter incrassatis, subsessilibus, 50-70 $\approx 14-18$, octosporis, aparaphysatis; sporidiis distichis, fusoideis, medio 1-septatis, non constrictis, 18-30 $\approx 5-8$, hyalinis v. subhyalinis.

Hab. in foliis *Fici* oreodryadum, Rugege-Wald Africa trop. — *Plowrightiæ basirufæ* (B. et C.) v. Höhn. et *Pl. Koordersei* (P. Henn.) v. Höhn. affinis.

3. *Plowrightia Agaves* Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 4794 p. 143. — Ita vocanda *Hypocrea Agaves* Maubl. — Syll. XVII, p. 802 — ex ipso auctore.

4. *Plowrightia Williamsoniana* Kellerm., Journ. of Mycol. XII (1906) 4795 p. 186. — Stromatibus per epidermidem erumpentibus, globosis vel subpolygoniis vel oblongis, 250-750 μ . alt., 0,5-2 mm. long., concentrice seriatim dispositis, primum maculum definitam suborbicularem v. oblongam efformantibus, sæpe folio partim v. omnino tandem infecto; stromatibus primum fulvis dein fuscis demumque nigris, minute papillatis, non carbonaceis supra conidiferis; loculis numerosis usque ad 40 et ultra 110-125 $\approx 90-120$; ascis numerosis oblongis v. subovato-oblongis, inferne attenuatis 60-90 $\approx 12-20$, parietibus crassis, octosporis; sporidiis subdistichis, subæqualiter bilocularibus, ovoideo-oblongis, subfulvis v. hyalinis, plerumque 22-24 $\approx 5-6$; paraphysibus non visis.

Hab. in foliis vivis v. languidis *Agaves* americanæ prope urbem Guatemalam America centr. alt. 1200-1800 m. (W. A. KELLERMAN). — Teste cl. Maublanc non satis differt a specie præcedente.

5. *Plowrightia Massariæ* (Pass.) Saccardo, Not. Myc. VI, Ann. Myc. 4796 v. III (1905) p. 506, *Epicymatia Massariæ* Pass. — Syll. I, p. 573.

— *Stromatibus pulvinatis* in ostiolo *Massariæ* parasiticis, vix 1 mm. latis, nigris, subcorneis, intus minute pluri-locellatis, loculis excipulo proprio carentibus, 80 μ . diam., pallidis; ascis oblongo-cylindraceis, facile diffuentibus, paraphysibus filiformibus fuscellis copiose obvallatis; sporidiis fusoideo-oblongis, utrinque obtuse tenuatis 12-16 \times 6-7,5, rectis, 1-septatis, non constrictis, hyalinis, farctis.

- Hab.* in ostiolis *Massariæ* Curreyi ad ramos Tiliæ in viridario publico, Parma Ital. bor. (PASSERINI). — Species inter *Dothideaceas* eximia et vere peculiaris ob parasitismum in *Pyrenomycetis*. Status pycnidicus est *Placosphaeria Massariæ*, quam cfr.
6. *Plowrightia luxurians* Rehm in Theissen Beih. Bot. Centralbl. Bd. 4797 XXVII (1910) Abt. II, p. 392. — *Stromatibus crasse pulvinatis* v. subglobosis, 6-20 mm. diam., intus lignosis, extus atris, papillis obtuse conoideis, asperrimis; peritheciis in strato peripherico polystichis, immersis; ascis cylindraceis, breviter stipitatis, p. sp. 110-130 \times 10-12; sporidiis ellipsoideis, hyalinis, rotundatis, 18-24 \times 8-10, primo diuque continuis, demum 1-septatis.

Hab. ad ramos, Rio Grande do Sul Brasilæ.

7. *Plowrightia Hieronymi* (Speg.) Spegazz., Fungi Paulist. Rev. Mus. 4798 La Plata t. XV, pag. 27. — Ita vocanda *Dothidella Hieronymi* Spegazz. — Syll. II, p. 627 — ex ipso auctore.

MICROCYCLUS Sacc. — Syll. XVII, p. 844. — Pro *Microcyclo scutula* (B. et C.) Sacc. et Syd., prof. v. Höhnelt novum genus condidit nomine *Coccoidella*, cum gen. *Microcylus* Sacc. ex parte cum *Polystomella* Speg. collidat; rectius tamen servandum est nomen *Microcylus*, addita nota: *char. emend.*

1. *Microcylus Derridis* P. Henn., Fl. du Bas- et Moy.-Congo, Ann. 4799 Mus. du Congo, v. II, fasc. II (1907) p. 99. — Maculis flavidulis; stromatibus superficialibus amphigenis plerumque epiphyllis gregariis v. sparsis et nervos sequentibus, disciformibus, atris opacis, rugulosis, c. 0,2-0,3 mm. diam.; loculis immersis paucis; ascis clavatis, obtusis, 8-sporis, 30-55 \times 14, paraphysatis; sporidiis subdistichis oblongis v. subclavatis, hyalinis, medio 1-septatis haud constrictis, 10-15 \times 4-5.

Hab. in foliis *Derridis*, Dembo Congo, Africæ trop.

2. *Microcylus Koordersii* P. Henn., in Koorders, Botan. Untersuch. 4800 (1907) p. 183, fig. 15(1-6) et in Rehm Ascomyc. exsicc. n. 1615. — *Stromatibus superficialibus hypophyllis*, gregarie sparsis, inter-

dum confluentibus, pulvinato-discoideis, coriaceis, atris, rugulosis, sparse setulosis, 0,3-1 mm. diam.; loculis subimmersis ellipsoideis, porosis, atro-olivaceis; ascis clavatis apice obtuso-rotundatis, 8-sporis, 55-65 \times 10-15, apapophysatis; sporidiis subdistichis, oblonge fusoides v. subclavatis, utrinque rotundatis, interdum subcurvulis, medio 1-septatis, haud constrictis, hyalinis, 22-32 \times 4,5-5,5.

Hab. in foliis vivis *Myricæ germanicæ* (?) in M. Sendoro prope Kledung Java (KOORDERS)

DIPLOCHORA v. Höhnelt, Sitzb. k. Ak. d. Wiss. Wien, CXV Abt. I (1906) pag. 1201 (Etym. *diploos* duplex et *chora* pro *Phyllachora*). Est genus *Phyllachoræ* affine sed sporidiis connato-binis. Huc du-cenda est *Phyalospora dissospora* Feltg., Sacc., Syll. XVII, p. 583.

DOTHIDELLA Speg. — Syll. II p. 627, IX p. 1036, XI p. 375, XIV p. 676, XVI p. 626, XVII p. 846.

1. *Dothidella spinicola* v. Höhn., Ann. Naturh. Hofmüs. Wien XX, 4801 (1905) Heft 4, Extr. pag. 3. — Stromate tenui, ruguloso, nigro, pseudoparenchymatico, poris loculorum pertuso; paraphysibus nullis; ascis octosporis, elongato-ovoideis crasse tunicatis, 35-40 \times 16; sporidiis hyalinis, utrinque rotundatis, uno latere angustatis, elongato-clavatis, bilocularibus, 2-3-guttulatis, 12-13 \times 5.

Hab. in spinis foliorum *Astragali* sp., Lifos Erdschias-Dagh, Anatolia.

2. *Dothidella* ? *platyasca* Speg., An. Mus. Nac. Buenos Aires t. XIX, 4802 p. 420, cum icon. — Stromatibus epiphyllis densiuscule gregariis hemisphæricis, innato-prominulis 150-250 μ . diam., nitentiusculis 1-locularibus, loculo globuloso 100-120 μ . diam.; ascis compresso-applanatis e fronte obovatis e latere linearibus sessilibus, 42-55 \times 10-20 non v. parce paraphysatis; sporidiis obovatis ad tertium inferum 1-septatis, ad septum non v. leniter constrictis, 14-17 \times 6-8, primo hyalinis dein chlorinis.

Hab. ad folia viva *Pithecolobii* scalaris in silvis prope Orán Argentineæ Amer. austr.

3. *Dothidella Stellaris* (Lib.) J. Lind, Ann. mycol. (1905) pag. 423, 4803 *Dothidea Stellaris* Lib., *Euryachora Stellaris* (Lib.) Fuck. — Syll. II, p. 625. — Status ascophorus: ascis 25 \times 10, octosporis; sporidiis inæqualiter bicellularibus, hyalinis, 10 \times 5, cellula inf. 3 \times 3.

Hab. in foliis caulibusque *Stellaris* holostear, Viborg Daniæ, socio pycnidio (*Placosphaeria Stellaris* Sacc.).

4. *Dothidella Hualaniæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4804 (1909) p. 419. — Stromatibus laxè gregariis erumpentibus tuberculiformibus et 2-3 mm. diam., nigris, loculis constipatis, globosis vix papillato-ostiolatis 90-100 μ . diam.; ascis subclavulatis basi breviter crasseque pedicellatis, 70 \approx 16, aparaphysatis v. pseudoparaphysibus parvis immixtis, octosporis; sporidiis distichis ellipsoideo-didymis, utrinque rotundatis 16-18 \approx 8-9, parum infra medium 1-septato-constrictis, hyalinis.

Hab. ad ramulos languidos v. emortuos *Hualaniæ* collectioidis, Potrerillos prope Mendoza Argentina America austr.

5. *Dothidella mulinicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4805 (1909) p. 420. — Stromatibus matricem fere totam ambientibus atque infusantibus, carbonaceis, loculis numerosis constipatis, subglobosis 70-80 μ . diam.; ascis ellipsoideo-subclavatis aparaphysatis, basi brevissime noduloseque pedicellatis, 60 \approx 20, octosporis; sporidiis acicularibus, uniseptatis, non constrictis, hyalinis, 30-40 \approx 4-5.

Hab. ad folia viva *Mulini axilliflori* in alpinis Jujuy, Argentina Amer. aust.

6. *Dothidella Buxi* v. Höhn., Ann. mycol. III (1905) p. 330. — Stromatibus in maculis albidis linea nigra limitatis insidentibus, subcopiosis, $\frac{1}{2}$ - $\frac{9}{10}$ mm. diam., nigris, carbonaceis, pseudoparenchymaticis, irregulariter angulosis, epidermide lacinulata limitatis, in epiphyllis levibus v. rugulosis; loculis numerosis, ovoideis, c. 100 μ . cr.; ascis numerosis, clavatis, octosporis, 80 \approx 6-8; paraphysibus paucis filiformibus; sporidiis distichis, hyalinis, bilocularibus, loculo uno majore, medio non v. vix constrictis, 11-14 \approx 2-3,5, elongatis, utrinque rotundatis.

Hab. in foliis adhuc vivis *Buxi sempervirentis*, prope Evisa Corsica.

7. *Dothidella peruviana* P. Henn., Engl. Jahrb. XL (1907) p. 227. — 4807 Stromatibus hypophyllis, innato-superficialibus, sparsis vel gregariis, pulvinato-applanatis, rotundatis vel effusis confluentibusque, atris opacis, rugulosis; ostiis prominulis obtusis, usque ad 1 cm. longis, 2 mm. latis; loculis immersis, subglobosis c. 150-160 μ . diam.; ascis fusoides v. clavatis, apice crasse tunicatis, obtusiuseculis, 8-sporis, obsolete paraphysatis, 80-100 \approx 17-20; sporidiis subdistichis v. conglobatis, longe fusoides, rectis v. curvulis, obtusiuseculis v. acutiuseculis, medio 1-septatis, hyalinis, 35-50 \approx 5-7.

Hab. in foliis *Baccharidis* sp., Sandia Perù (WEBERBAUER).

8. *Dothidella Diplothemii* Syd., Ann. Mycol. V (1907) p. 360. — Ma- 4808

culis nullis; stromatibus epiphyllis, innatis, sparsis vel seriatim ordinatis, minutis et oblongis vel plerumque confluentibus, linearibus et tunc usque $\frac{1}{2}$ -1 cm. longis, atris, carbonaceis, nitidis; loculis paucis vel pluribus, majusculis; ascis oblongo-clavatis, apice rotundatis, basi in pedicellum longiusculum attenuatis, rectis vel curvulis, $50-70 \times 10-14$, octosporis; sporidiis distichis, oblongis, utrinque lenissime attenuatis, medio 1-septatis, non constrictis, hyalinis vel hyalino-chlorinis, $14-16 \times 3-5$; stromatibus conidiophoris similibus, sed plerumque minoribus; conidiis navicularibus, utrinque acutiusculis, 1-cellularibus, intus nubiosis, hyalinis, $14-16 \times 2-2\frac{1}{2}$.

Hab. in foliis *Diplothemii maritimi*, Rio de Janeiro, Brasilæ.

9. *Dothidella Musæ* v. Höhn., *Fragm. z. Mykol.* V, Sitzb. k. Ak. d. 4809 Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 130. — Stromatibus hypophyllis, arcetè confertis v. hinc inde in crustas 0,5-1,5 mm. latas, rotundatas, irregulariter scabras confluentibus, minutis usque ad 250 μ . latis, nitidulis, nigris, loculo usque ad 180 μ . lato; paraphysibus paucis, crassiusculis filiformibus; ascis clavatis, supra rotundatis, sessilibus, octosporis, $40-60 \times 9-10$; sporidiis distichis, hyalinis, medio non septato-constrictis, apice acutis v. obtusulis, rectis v. curvulis, $14-16 \times 4-4,5$.

Hab. in foliis *Musæ paradisiacæ*, Upolu prope Apia Samoa (RECHINGER).

10. *Dothidella Andropogonis* P. Henn., in *Fl. du Bas- et Moy.-Congo*, 4810 Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Stromatibus amphigenis, gregariis, rotundatis v. oblongis, atris, planis, loculis immersis; ascis oblonge clavatis, vertice obtuse rotundatis, 8-sporis $70-90 \times 8-12$, paraphysibus filiformibus, ramosis, c. 0,5 μ . cr.; sporidiis oblique monostichis v. subdistichis, ellipsoideis, hyalinis, medio septatis haud constrictis, $8-12 \times 6-8$,

Hab. in foliis *Andropogonis*, Kisantu Congo Afr. trop. (VANDERYST).

MUNKIELLA Speg. — Syll. IX p. 1034, XVI p. 625.

1. *Munkielli melastomata* v. Höhn., *Fragm. z. Mykol.* (1909) VIII, 4811 in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1220. — Stromatibus numerosis gregariis v. per paginam superiorem immutatam foliorum sparsis, rotundatis 0,3-1,5 mm. latis, quandoque paucis adnatis, 1-3-loculigeris, depresso conoideis v. hemisphæricis,

levibus, verruculosis v. radiatim rugusulis, nigro-piceis nitidis, usque ad 200 μ . altis, subcuticularibus; contextu partim parenchymatico; paraphysibus paucis, tenuibus, filiformibus; ascis tenuiter tunicatis, supra rotundatis, basi breviter acutatis, sessilibus, 44-64 \times 12-17, octosporis; sporidiis plerumque distichis, hyalinis, senio fluvidulis, ellipsoideis, basi breviter attenuatis, bilocularibus; loculo superiore majusculo, inferiori 1,5-2 μ . alto; sporidiis 13-16 \times 6,5-8, stratu mucoso tenuissimo vestitis.

Hab. in foliis vivis *Melastomatis malabathrici* prope Buitenzorg in ins. Java. — *Munkiella* ? *pulchellæ* Speg. videtur affinis.

SCIRRHIA Nits. ap. Fuck. — Syll. II p. 634, IX p. 1040, XI p. 376, XIV p. 679.

1. *Scirrhia luzonensis* P. Henn., Hedwigia XLVII (1908) p. 256. — 4812 Maculis oblongis vel striiformibus, fuscis; stromatibus epiphyllis sparsis, oblongis, erumpentibus, fusco-atris, 0,5-1 mm. longis, loculis seriatis ostiolatis; ascis clavatis, obtusis, 8-sporis, 60-80 \times 7-9; sporidiis subdistichis, oblonge fusoideis, utrinque acutis v. rostellatis, hyalinis, medio 1-septatis, 20-30 \times 3-3,5.

Hab. in foliis *Bambusæ*, Luzon, Prov. Laguna, Los Baños ins. Philipp. (MERRILL).

Sect. 5. Phæodidymæ.

DOTHIDEA Fr. — Syll. II p. 639, IX p. 1043, XI p. 377, XIV p. 680, XVI p. 628, XVII p. 852.

1. *Dothidea Sambuci* (Pers.) Fr. — Syll. II, p. 639 — Var. *Hederæ* 4814 De Not. Micromyc. Dec. I, p. 13, fig. 8 (extr.). — A typo vix differt stromatibus latioribus, atro-nitidis, intus obscurioribus; cetera eadem.

Hab. ad sermenta *Hederæ Helicis* emortua in collibus pr. Taurinum Ital. bor. — Var. *Ilicis* Jacz. in Bull. Soc. Mycol. Fr. XI (1895) p. 173, t. 14, f. 9. — Sporidiis paullo majoribus, nempe 25 \times 7,5. — In foliis ramulisque *Ilicis Aquifolii*, in silvis Vaud Helvetiæ.

2. *Dothidea tumefaciens* Syd., Ann. Mycol. V (1907) pag. 360. — 4814 Stromatibus ramicolis, tumores 1-2 cm. longos et crassos efformantibus, erumpentibus, pulvinatis, 1-2 mm. diam., solitariis vel

aggregatis confluentibusque, rugulosis, atris, opacis; peritheciis numerosis; ascis clavatis, apice rotundatis, breviter pedicellatis, 50-75 \times 9-15, octosporis; sporidiis distichis, oblongis, medio 1-septatis, primo hyalinis, dein olivaceis vel dilute brunneis, 20-28 \times 3 $\frac{1}{2}$ -5.

Hab. in ramis *Serjanie* spec. Campinas, Prov. Sao Paulo, Brasilia. — A *Dothidella Serjanie* pluribus notis distincta.

ROUSSOELLA Sacc. — Syll. IX p. 1044.

1. *Roussoella amphigena* Rick, Broteria V (1906) p. 44. — Stromate 4815 dothideaceo, erumpente, pulvinato, rugoso, aliquoties rhytismoideo et tunc oculis paucis, atro, orbiculari, amphigeno, gyroso, ostiolis consperso; ascis ventricosus 60-70 \times 20-25, versus apicem angustatis, vix pedicellatis; sporidiis cylindraceis aut rectangularibus, 25 \times 10, pluriserialibus, bicellularibus, loculo inferiore vix breviora flavidulis, in septa constrictis; paraphysibus conglutinatis.

Hab. in foliis vivis Lauraceæ cujusdam, Rio Grande do Sul Brasiliæ. — Videtur potius *Russoella* nec *Dothidea* ob cellulas sporidiorum fere æquales.

PHÆODOTHIS Syd. — Syll. XVII p. 854.

1. *Phæodothis congoënsis* Sacc., Myc. cong. novi, Ann. Myc. v. IV 4816 (1906) p. 77. — Stromatibus amphigenis, gregariis sed vix seriatis neque confluentibus, immersis, applanatis, ambitu irregulariter orbiculari-oblongis, 1 mm. longis, 0,5 mm. lat. v. minoribus, tenui-carbonaceis, opace nigris, intus paullo dilutioribus, 3-5-locellatis, oculis globosis 130-140 μ . diam., ostiolis punctiformibus vix manifestis; ascis tereti-clavulatis, apice rotundatis, deorsum leviter tenuatis, 50-60 \times 6,5-7,5 parce filiformi-paraphysatis, octosporis; sporidiis distichis, oblongis, utrinque, præcipue apice, obtuse rotundatis, rectis, medio 1-septatis, levissime constrictis, 14-15 \times 5-5,2, rectis, olivaceo-fuscis.

Hab. in foliis nondum putridis graminis cujusdam elatioris (habitu Sacchari stricti), Kisantu Congo Africæ trop. (J. GILLET). — Certe affinis *Phæodothidi Tricuspidis*, sed satis differt stromatibus non confluentibus nec seriatis, ascis angustioribus etc.

DISCODOTHIS v. Höhn. Fragm. Mykol. VII (1909) in Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 853 (Etym. *discos* et *Dothis* pro *Dothidea*). — Stromata primum strato conidico cladosporioideo omnino tecta, superficialia, omnino immersa, non secedentia; ostio-

la nulla; loculi depressi, indistincti, confluentes; paraphyses nullæ; asci octospori; sporidia bilocularia, brunnea. — *Mauurodothis* Sacc. et Syd. est certe affinis sed differt stromate arctius adnato, statu conidico nullo, paraphysibus bene evolutis.

1. *Discodothis Filicum* v. Höhn., l. c. p. 854. — Stromate rotundato 4817
v. elongato 0,5-1,5 mm lato, 90-100 μ . crasso, plectenchymatico, demum glabro, opaco, ruguloso nigro, primum conidiis pallide brunneolis, raro unilocularibus, utrinque ex obtuso acutatis, 8-9 \times 6,5-7, plerumque irregulariter bilocularibus 10-13 \times 6-7, medio constrictis, utrinque obtusis, in apice hypharum lateraliter parce dispositis tectis; loculis latis depressis, indistincte limitatis, ostioliis nullis sed demum stromate supra irregulariter ascomatiformi aperto; paraphysibus nullis; ascis clavatis, tenuiter tunicatis, supra non incrassatis, octosporis, sessilibus v. vix pedicellatis, 50-80 \times 10-12; sporidiis distichis, pallide brunneolis, elongatis, bilocularibus, loculo superiori parum latiori, utrinque rotundatis, 12-13 \times 5-6; hypostromate circ. 30 μ . cr., nigro-rubro-brunneo, indistincte parenchymatico.

Hab. in frondibus Filicis cujusdam in Horto bot. Buitenzorg in ins. Java.

Sect. 6. Hyalophragmiæ.

ROUMEGUERIA (Sacc.) P. Henn. Hedw. XLVII (1908) p. 256, *Homostegia* subg. *Roumegueria* Sacc. — Syll. II, p. 650 — A typo *Homostegia* differt imprimis sporidiis hyalinis (æque pluriseptatis) et habitatione in Phanerogamis. Est fere *Phyllachora* hyalophragmia.

1. *Roumegueria Ichnanthi* P. Henn., Hedwigia XLVII (1908) p. 256. 4818
— Maculis fusciculis striiformibus; stromatibus amphidymis minutis, rotundatis, striiformiter confluentibus, atris, paucilocularibus; ascis clavatis v. fusoides, obtusis v. acutiusculis sæpe curvulis, 8-sporis, 45-60 \times 5-7; sporidiis subdistichis, fusoides, utrinque subacutis, sæpe curvulis, hyalinis, 4-5-septatis, 15-20 \times 3 $\frac{1}{2}$ -4.

Hab. in foliis *Ichnanthi* sp., Mindora, Mt. Halcon ins. Philippin. (MERRILL).

2. *Roumegueria graminis* (v. Höh.) Sacc. et Trott., *Homostegia gra-* 4819
minis v. Höhnel, Fragm. z. Mykol. III, in Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 131. — Stromatibus foliicolis

300 μ . circ. cr., rotundatis v. elongatis, nigris, immersis, in utraque pagina visibilibus, sed in superiore magis evolutis, mono- v. bi-locularibus, loculis 100–200 μ . latis; paraphysibus mox mucosis; ascis tenuiter tunicatis, clavatis, sessilibus, octosporis, 60–72 \times 5–6; sporidiis distichis, hyalinis, plerumque sexlocularibus, subfusoides, supra rotundatis, basi longe acutatis, 15–18 \times 3.

Hab. in foliis graminaceæ cujusdam (? *Panicum*), Samoa (RECHINGER). — Quum socia adsit sæpe etiam *Phyllachora graminis*, cum stromatibus simillimis iis *Homostegia*, dubium est an hæc parasitice vivat in stromatibus *Phyllachoræ*.

3. *Roumegueria gangræana* (Fr.) Sacc. in Ann. Myc. X (1912) p. 316, 4820
Phyllachora gangræana (Fr.) Fuck. — Syll. II, p. 604. — *Homostegia gangræana* (Fr.) Wint. Deutsch. Pilze II, p. 917.

Hab. in foliis vivis Poæ bulbosæ fm. viviparæ, Avelino, vere 1904, ubi ipse legi — Stromata nunc maculiformia, nunc valde elongata e totum fere folium occupantia et torquentia, atherima, plano-convexula, intus plurilocellata; loculi globosi, non conferti, 100 μ . diam., ostiolis circularibus, non emergentibus, 20 μ . diam. pertusi. Asci tereti-saccati, apice rotundati, brevissime stipitati, 30–35 \times 11–12, octospori; paraphyses subtortuosæ, hyalinæ, parum distinctæ; sporidia subtristicha, v. oblique monosticha diu ovato-ellipsoidea, 1–2-guttata, 11 \times 4,5–5, denique oblonga, utrinque rotundata sæpius leviter curvula, 2-septata, 14 \times 5,5, semper hyalina.

COCCODIELLA Hara, Botan. Magaz. Tokyo v. XXV (1910) n. 293, pag. 224 (non *Coccoidella* Höhnelliana, ubi sporid. 1-sept.). — Stroma obscurum, disciforme, plano-convexum, subtus centro stipitiformi appendiculatum; perithecia (loculi) immersa, globosa, ostiolata; asci cylindracei, octospori, paraphysati; sporidia ellipsoidea, biseptata, hyalina.

1. *Coccodiella Arundinariæ* Hara, l. c. p. 224, cum icone. — Stro- 4821
 matibus hypophyllis, raro epiphyllis, gregariis v. sparsis, subcar-nosis, disciformibus, subtus stipitiformi appendiculatis, margine libero, 0,8–1,5 mm. (plerumque 1 mm. diam.), superficie minute granulosa, obscure coloratis, intus albis v. griseis, membranaceis; loculis immersis, globosis v. oblongis, ostiolatis 100–150 μ . diam.; ascis cylindraceis v. clavatis, stipitatis, octosporis, 50–66 \times 7–10; paraphysibus filiformibus 1–2 μ . cr., hyalinis; sporidiis distichis ellipsoideis v. cylindraceis (raro oblongis), biseptatis, hyalinis, 12–15 \times 4–5.

Hab. in foliis vivis *Arundinariæ* Simoni, prov. Musashi, Tokyo (MATSUSKA), *Sasæ borealis*, prov. Mino, Kawaueyemura (HARA).

MONTAGNELLA Speg. — Syll. II p. 646, IX p. 1045, XI p. 377, XIV p. 682, XVI p. 629.

1. **Montagnella Berberidis** d'Alm. et da Cam., Bol. Soc. Brot. XXIV 4822 (1908-1909) Extr. pag. 21. — Stromatibus suborbicularibus, atris, solitariis, subsuperficialibus, diu epidermide velatis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. dm.; loculis variis plus minus rotundatis; ascis clavulatis, sursum deorsumque sæpe attenuatis, non v. vix pedicellatis, octosporis, aparaphysatis, 50-70 \times 14-16; sporidiis plerumque tristichis, oblongo-fusoideis, utrinque rotundatis, triseptatis, primo hyalinis, demum fuscis, medio constrictis, 15-18 \times 5-6.

Hab. in ramis exsiccatis *Berberidis vulgaris*, in Horto bot. Coimbra Lusitaniæ (A. MOLLER).

2. **Montagnella Opuntiarum** Speg. — Syll. IX, p. 1047 — var. minor 4823 Spegazz. An. Mus. Nac. Buenos Aires t. XIX (1909) p. 422. — A typo recedit stromatibus 1-3 mm. diam.; ascis 60-70 \times 20; sporidiis 28-30 \times 5-6, 3-septatis, non constrictis.

Hab. ad flagella *Rhynpsalidis lumbricoidis* prope La Plata, Argentina. — Var. *microcarpa* Speg., l. c. p. 422. — Plagulis stromaticis orbicularibus majusculis 2-5 cm. diam. dense granuloso-loculigeris; ascis subfusoideis, 55-60 \times 8-15, aparaphysatis; sporidiis fusoideis utrinque acutatis 15-16 \times 2,5-3, 3-septatis non constrictis, hyalinis. — Ad truncos vivos *Cerei* candicantis, Cachaeta prope Mendoza Argentina. — An species distincta?

3. **Montagnella Missionum** Speg., An. Mus. Nac. Buenos Aires t. XIX 4824 (1909) p. 422. — Stromatibus subglobosis 2-3 mm. diam., gemmas v. ramulos infectantibus, nigris, verruculosus; peritheciis in stromate superficialibus, dense constipatis subglobosis 180-250 μ . diam.; ascis subcylindraceis brevissimeque stipitatis, 100-120 \times 16-25, parce paraphysatis; sporidiis sæpius distichis, subcylindraceis 38-40 \times 9-10, 1-5-septatis, primo hyalinis dein olivaceis, submajusculis.

Hab. ad ramulos vivos *Mayteni ligustrini?* in silvis pr. Bompland Argentina, America austr. (P. JORGENSEN).

4. **Montagnella mendozana** Speg., An. Mus. Nac. Buenos Aires t. XIX 4825 (1909) p. 421, cum icon. — Stromatibus endogenis per ramulos incrassatos fissos erumpentibus nigris, subcarbonaceis dense gra-

nuloso-loculigeris, 1-5 cm. long., loculis hemisphaericis 120-180 μ . diam. eximie papillato-ostiolatis albo-farctis; ascis subclavatis breviter crasseque pedicellatis 100-110 \times 18-20, octosporis, paraphysatis; sporidiis distichis cylindræis, 40 \times 8-9, 3-septatis, ad septa non constrictis, primo hyalinis serius fumosis.

Hab. ad ramos vivos *Artemisiæ mendozanæ* in preandinis Cacheuta et Potrerillos prope Mendoza, Argentina Amer. austr.

RHOPOGRAPHELLA P. Henn. ut subg., Fung. Amaz. II, pag. 257 (1904) et Syll. XVII, p. 858. — A typo *Rhopographi* distinguitur sporidiis hyalinis v. subhyalinis et subinde appendiculatis. — Huc ducendæ species *Rhop. Gaduæ* (P. Henn.) Sacc. et Trott. et *Rhop. Gynerii* (P. Henn.) Sacc. et Trott.

1. **Rhopographella Taquaræ** (Rehm) Sacc. et Trott., *Rhopographus Ta-* 4826
quaræ Rehm, Ann. Mycol. VI (1908) pag. 318. — Stomatibus parallele innatis, culmum ampliatus ambientibus et nigrificantibus, demum striiformiter perforantibus, itaque rimosus, extus nigris, 1-2 cm. longis, intus flavo-virentibus, ostiis globosis, in rimis culmi seriatis; loculis immersis, monostichis, globosis, 0,15 mm.; ascis cylindræo-clavatis, apice rotundatis, ca. 150 \times 15-18, octosporis; sporidiis oblongo-fusoideis, utrinque subobtusis, haud appendiculatis, 5-7-septatis, ad septa non constrictis, plerumque rectis, hyalinis, 30-35 \times 6-7, distichis; paraphysibus filiformibus, hyalinis, 2 μ . crassis.

Hab. in culmo *Gaduæ Taquaræ*, Sao Leopoldo, Rio Grande do Sul Brasiliæ (Rick S. J.). — Affinis *Rhopographellæ Gaduæ* sed satis distincta.

Sect. 7. Phæophragmiæ.

HOMOSTEGIA Fuck. — Syll. II p. 649, IX p. 1049, XIV p. 683, XVI p. 631, XVII p. 857.

1. **Homostegia Piggottii** (B. et Br.) Karst. — Syll. II, pag. 649. — 4827
var. *Peltigeræ* Rehm, Ann. Mycol. VI (1908) pag. 524. — Ascis cylindræis c. 100-120 \times 18-20, octosporis; sporidiis 4-ocularibus, 1 v. 2 cellulis mediis longitudinaliter divis, flavo-brunneis, 21-25 \times 10-12, monostichis.

Hab. in *Peltigera canina* prope Hohenaschau Bavaria (SCHNABL), Scheibenhof prope Kreims Austriæ inf. (LOJKA).

2. *Homostegia andina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4828 (1909) p. 423. — Stromatibus minutis erumpentibus, 0,5-1 mm. long., 0,2-0,4 mm. diam., pauci-ocularibus carbonaceis, loculis constipatis 100-150 μ . diam.; ascis subcylindræis aparaphysatis, basi brevissime noduloseque pedicellatis 70-80 \times 16, octosporis; sporidiis elongato-didymis, distichis, utrinque obtusiusculis 18-22 \times 7-8, primo 1- scrius 3-septatis, 2-4 grosse guttulatis, olivaceis.

Hab. ad ramulos *Verbenæ ephedroidis* in præandinis *Cachenta*, prope Mendoza Argentina Amer. austr.

3. *Homostegia fusispora* Syd., Ann. Mycol. VIII (1910) pag. 39. — 4829 Maculis amphigenis, minutis, flavidis, 2-4 mm. diam., indeterminatis; stromatibus epiphyllis, immersis, solitariis v. paucis aggregatis, minutis, parum prominulis, ellipticis, atris, intus 1- v. pauci-ocularibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. long.; ascis fusiformibus v. clavatis, 60-100 \times 12-18, octosporis; sporidiis fusoides, utrinque acutiusculis, distichis, 6-7-septatis, non constrictis, primo hyalinis, tandem brunneolis, 30-40 \times 6-7.

Hab. in foliis vivis *Bambusæ*, Dumaguete in Cuernos Mts. prov. Negros or. ins. Philippinensium (A. D. E. ELMER).

Sect. 8. Hyalodictyæ.

CURREYELLA (Sacc.) Lind. in Engl. Pflanzenf. I, p. 379. *Curreya* subg. *Curreyella* Sacc. Syll. XI, p. 379.

1. *Curreyella Aucupariæ* R. L. Smith, Trans. Brit. Mycol. Soc. 1907 4830 v. III (1908) p. 43, tab. I, fig. 9. — Stromatibus cortici interiori adnatis, erumpentibus, fusco-nigris magnitudine ludibundis, hemisphæricis v. elongatis, c. 1 mm. long.; loculis seu peritheciis paucis; ascis clavatis usque ad 200 \times 12; sporidiis clavato-fusoides, 5-6-septatis parceque muriformibus, ad septa submedia leviter constrictis, 30-40 \times 8-10, hyalinis.

Hab. ad ramos *Piri Aucupariæ*, Dunkeld Scotiæ (MACINTOSH). — Loculi indicatur 30-40 μ . diam., sed probabiliter legendum est 300-400.

2. *Curreyella palmincola* (Rehm.) Sacc. et Trott, *Curreya palmincola* 4831. Rehm, Ann. Mycol. V (1907) p. 530. — Stromatibus innatis, oblongo-ellipsoideis, 2-12 mm. longis, 2-6 mm. latis, in utraque folii

pagina conspicuis, planis, purpureis, flavidulo-marginatis, tenuibus, contextu membranaceo, parenchymatico, fusco, glabris; loculis per multis ca. 100 μ . latis confertis, apice globoso-subprominentibus, siccis ruguloso-collapsis; ascis subglobosis, crasse tunicatis, ca. 30 \times 25, octosporis; sporidiis oblongis, utrinque rotundatis, rectis, transverse 3-septatis, cellula secunda longitudinaliter 1-septata, hyalinis, 12 \times 4; paraphysibus ramosis, ascos circumeuntibus.

Hab. in folio Palmæ, Sao Paulo, Brasilia (USTERI). — *Curreya bambusicolæ* proxima, sed probe distincta.

3. *Curreyella Rehmii* (Schnabl) A. L. Smith., l. c. p. 43 = *Curreya* 4832
Rehmii Schnabl — Syll. XI, p. 379.

Sect. 9. Scolecosporæ.

OPHIOOTHIS Sacc. — Syll. II p. 552, IX p. 1051, XIV p. 685, XVI p. 632, XVII p. 859.

1. *Ophiodothis Arundinellæ* P. Henn., Engl. Jahrb. XXXVII (1905) 4838 p. 162. — Stromatibus in axillis vaginalibus inclusis, corniformibus cylindraceis, obtusis, atris, c. 5 mm. long., 2 mm. cr. verrucoso-rugulosis; loculis dense stipatis, ovoideo-ellipsoideis; ascis longe cylindraceis apice rotundato-capitellatis, octosporis, 120-150 \times 4-6; sporidiis parallelis, filiformibus, pluriguttulatis v. septulatis, hyalinis, 1,5-2 μ . latis.

Hab. ad culmos *Arundinellæ* anomalæ, Umajiura Tosa Japonia (YOSHYNAGA). — *O. Paspali* P. Henn. affinis sed stromatibus brevioribus, ascis longioribus, sporidiis latioribus diversa.

2. *Ophiodothis Schillingii* P. Henn., Engl. Jahrb. XXXVIII (1905) 4884 pag. 114. — Stromatibus cylindraceo-typhoideis, apice attenuatis, subulatis, spicas omnino destruentibus deformantibusque, crusta atra vestitis, 6-7 cm. long., 3-4 mm. cr.; loculis gregariis immersis, globulosis, c. 140-170 μ . diam., punctoideo-ostiolatis; ascis cylindraceis, apice obtuso-rotundatis, octosporis, 100-130 \times 4-5; sporidiis parallelis, filiformibus, pluriguttulatis v. septulatis, hyalinis, 1-1,5 μ . cr.

Hab. in inflorescentiis *Rottbœlliæ* sp., Sokode Togo Africae centr. (SCHILLING).

Incertæ sedis.

MYXODISCUS v. Höhn., *Fragm. z. Mykol.* II, in *Sitzb. k. Ak. d. Wiss. Wien CXV* (1906) Abt. I, p. 23.

1. **Myxodiscus confluens** (Schwein.) v. Höhn., l. c. pag. 23, *Xyloma* 4885
confluens Fr., *Rhytisma confluens* Fr. — *Syll.* VIII, p. 760 —
Dothichiza ? *Eupatorii* C. Mass. — *Syll.* X, p. 433 — *Leptostroma*
Eupatorii Allesch.

Fam. 7. Hypocreaceæ ().**Sect. 1. Hyalosporæ.*

HYPONECTRIA Sacc. — *Syll.* II p. 455, XI p. 354, XIV p. 621, XVI p. 559.

1. **Hyponectria Volkartiana** Rehm, *Ann. Mycol.* V (1907) p. 543. — 4886
Peritheciis in maculis fuscis 1 cm. long., 0,2-0,4 cm. lat., præcipue corticis interioris caulium gregarie innatis per peridermium elatum erumpentibus, denique sessilibus, globosis, vix papillulatis, fusco-nigrescentibus, pruina aurea obductis glabris, contextu tenuiter parenchymatico, fusco-rubro, 0,3 mm. diam.; ascis cylindraceis vel subfusiformibus, apice rotundatis, 120-130 × 12-15, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttulis oleosis repletis, strato mucoso 2 µ. lat., obductis, hyalinis, 18-20 × 9-10, 1-stichis; paraphysibus filiformibus, septatis, 3 µ. cr.

Hab. ad caules siccos Phacæ frigidæ, Fürstenalp, Graubünden Helvetiæ, 1900 m. alt. (Dr. VOLKART). — *Hyp. Penziana* proxima.

2. **Hyponectria Rhododendri** Rehm, *Ann. Mycol.* V (1907) p. 544. — 4887
Peritheciis hypophyllis, dispersis, innatis, in folii superficie haud mutata, semiglobosis, elatis, ostiolo minutissimo nigrescente promi-

(*) De non paucis generibus et speciebus Hypocreacearum cfr. observationes et emendationes cl. v. Höhnel in ejus variis contributionibus nuperioribus (in *Sitzungsb. k. Akad. Wien*, in *Ann. Mycol.* etc.) nec non cl. Seaver in « *Myco-logia* » 1910.

nentibus, globosis, contextu parenchymatico flavo-fuscidulo tenui, glabris, mollibus, 200 μ . diam.; ascis tenerrimis, clavatis, apice rotundatis, in stipitem sensim elongatis, 150-160 \approx 20-25, octosporis; sporidiis fusiformibus, plerumque utrinque acutatis, interdum apice superiore rotundatis, rectis, 1-cellularibus, guttas oleosas magnas 1-3 continentes, ceterum guttulis minutissimis repletis, strato tenui gelatinoso obductis, flavido-roseolis, 40 \approx 7-10, distichis; paraphysibus tenerrimis septatis, guttulis oleosis repletis, subramosis, 2 μ . cr., hyalinis.

Hab. ad folium putrescens *Rhododendri ferruginei* in alpe Alpein, Stubai, Tiroliae 2000 m. (REHM). — Primo obtutu cum *Lophodermio Rhododendri* fere commutanda.

3. *Hyponectria dakotensis* Sear, Mycologia I (1909) p. 20, tab. II, 4838 fig. 1-4. — Peritheciis sparsis v. subinde 2 v. pluribus congestis, demum plus minus erumpentibus, initio epidermide albida velatis, ostiolo disciformi erumpente, centro distincte pertuso praeditis, praesertim circa ostiolum pilosulis, 200 μ . diam.; ascis clavatis, octosporis, 30-45 \approx 5; sporidiis 2-seriatis vel deorsum 1-seriatis, fuscoideis, vulgo crasse 2-guttatis et utrinque minute 1-2-guttulatis, 10 \approx 2-2,5; paraphysibus delicatis.

Hab. in caulibus *Ambrosiae trifidæ*?, Forgo N. Dakota Amer. bor.

PHYSALOSPORINA Woronichin, Ann. Mycol. IX (1911) pag. 217 (Etym. a *Physalospora*). — Perithecia immersa stromate phyllogeno, tenui obsoleto, non carnoso immersa, globulosa, ostiolo brevi erumpente, contextu perithecii aurantio, roseo, ochraceo v. ostioli fuscescente molliusculo. Asci elongati, octospori, typice paraphysati. Sporidia ellipsoideo-oblonga, continua, hyalina. Pycnidia: *Rhodostica* Woronichin (h. e. *Polystigmina brevispora*). A *Polystigmate* typico differt stromate obsoleto, tenui, laxo, non carnoso, protuberante; a *Physalospora* peritheciis mollibus, laticoloribus.

1. *Physalosporina aurantia* (Ell. et Ev.) Sacc. *Physalospora aurantia* 4839 Ell. et Ev. North Amer. Pyren. p. 304, t. XXVII, — Peritheciis gregariis, parenchymate immersis, suboblongis 175-200 \approx 130-150, contextu amœne aurantiaco; ostiolis obtusis erumpentibus epidermide levissime pustulata et atrata subtectis; ascis clavato-cylindraceis, 100-110 \approx 12-15, paraphysibus crassiusculis, septatis, hyalinis obvallatis, octosporis; sporidiis monostichis v. subdistichis

oblongo-ellipsoideis, utrinque rotundatis, 12-22 \times 8-9, hyalinis, levibus, intus granulosus.

Hab. in foliis languidis *Astragali pectinati* Sand Coulee, Montana (ANDERSON). — *Physalospora Astragali* (Lasch) Sacc. peritheciis contextu atro-fuligineo distingui videtur.

2. *Physalosporina Caraganæ* Woronichin in Ann. Mycol. (1911) v. VII, 4840
Physalospora Caraganæ Woron. in Bull. Jard. imp. bot. St. Pétersb. XI (1911) p. 12. — Stromatibus amphigenis, griseo-roseis; peritheciis gregariis globosis v. oblongis, 290-420 \times 240-325, stromate immersis, vix apice eminentibus, contextu parenchymatico, roseo-ochraceo ad apicem peritheciis brunneo; ascis cylindraceo-fusoideis, octosporis, 87-105 \times 14-16, paraphysibus filiformibus, hyalinis; sporidiis ellipsoideis, hyalinis monostichis, 12-14 \times 7-8.

Hab. in foliis languidis *Caraganæ fruticis* pr. Sosnovka, Samara Rossie (E. ISPOLATOV). — Status pycn.: *Rhodosticta Caraganæ* Woron. quam cfr. — *Physalospora Astragali* peritheciis contextu atro-fuligineo distinguitur.

3. *Physalosporina obscura* (Juel) Woronich., l. c. — Ita vocandum 4841
Polystigma obscurum Juel — Syll. XIV, p. 625.
4. *Physalosporina megastoma* (Peck) Woronich., l. c. — Ita vocanda 4842
Physalospora megastoma (Peck) Sacc. — Syll. I, p. 437.
5. *Physalosporina australiensis* Sacc. — Ita vocandum *Polystigma* 4843
australiense Sacc. — Syll. IX, p. 945.
6. *Physalosporina astragalina* (Rehm) Woronich. l. c. — Ita vocanda 4844
Læstadia astragalina Rehm — Syll. XIV, p. 516.

NECTRIELLA Sacc. — Syll. II p. 448, IX p. 941, XI p. 354, XIV p. 621, XVI p. 559, XVII p. 778.

1. *Nectriella bacillispora* Trav. et Spessa, Bol. Soc. Brot. XXV (1910) 4845
p. 172 t. I, f. 5. — Peritheciis plerumque 4-6-cæspitosis, per epidermidem laceratam erumpentibus, globoso-depressis, 150-200 μ . diam., rubro-aurantiacis, circa ostiolum vix perspicuum umbilicatis; excipulo indistincte pseudo parenchymatico, aurantiaco-flavido; ascis copiosis, anguste cylindraceo-clavatis vel subfusoideis, deorsum attenuato-pedicellatis, apice obtusis, 30-35 \times 5-6 parce paraphysatis; sporidiis cylindraceo-bacillaribus, utrinque obtusis, biguttulatis, hyalinis, 5-6 \times 1-1 $\frac{1}{2}$ distichis.

Hab. in foliis siccis *Fourcroyæ giganteæ* in horto botanico conimbricensi Lusit. (A. MOLLER). — *Nectriellæ multine* valde

affinis; differt præcipue ascis minoribus, sporidiis minutis, perfecte bacillaribus et biguttulatis.

2. *Nectriella musicola* (Speg.) Sacc. et Trott., *Notarisiella musicola* 4846 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 404. — Peritheciis udis globulosis siccis subcorrugato-cupulatis 120-150 μ . diam., carnosulo-membranaceis, contextu roseo-subhyalino, minute albo-puberulis superne subglabratis; ascis obclavatulis, basi breviter cuneato-pedicellatis 60-65 \times 10-12, octosporis, aparaphysatis; sporidiis ellipsoideis, oblique distichis, 10-13 \times 5-6, primo subdiblastis dein grosse 1-guttulatis, levibus hyalinis.

Hab. ad caudices semicombustos putrescentesque Musæ paradisiacæ prope Tucumán, Argentina America aust. — A *Nectria Musæ* Pat. sporidiis semper ellipsoideis 1-ocularibus distincta.

RHYNCHONECTRIA v. Höhnelt (1903) — Syll. XVII p. 798 = *Eleutherosphæra* Grove, Journ. of Bot. (1907) p. 171.

1. *Rhynchonectria longispora* (Ph. et Plowr.) v. Höhn. l. c. — Ita 4847 vocanda est *Eleutherosphæra longispora* (Ph. et Plowr.) Grove — Syll. IX, p. 942.

THELOCARPON Nyl. — Syll. IX p. 946.

1. *Thelocarpon conoideum* von Höhnelt, Oest. bot. Zeitschr. Jahrg. 4848 1906, n. 11-12, Extr. p. 12. — Peritheciis viridi-flavidis, ovoideo-conoideis, 200-300 μ . diam., 350-400 μ . alt., basi leniter immersis; paraphysibus numerosissimis, 0,5 μ . cr.; ascis numerosis, longe pedunculatis, clavatis, supra cylindræco-angustatis et apice rotundatis circ. 200 \times 33; sporidiis numerosissimis, elongato-cylindræceis, utrinque rotundatis, unilocularibus, 6-11 \times 2,5-3.

Hab. ad terram in silvis prope Allenfsteig Austriæ inf. — *Thelocarpo conoidello* Nyl. affine.

BYSSONECTRIA Karst. — Syll. II p. 456, IV p. 942, XI p. 354, XIV p. 623, XVI p. 560.

1. *Byssonectria cupulata* Theiss., Ann. Mycol. (1910) p. 458, c. ic. 4849 — Peritheciis dispersis v. dense gregariis, minutis, globosis, flavo-aurantiis, typice bysso albido compactiusculo cupulam hemisphæricam efformanti singulis insidentibus, 170-240 μ . diam.; ascis cylindræceis, apice plerumque paullo incrassatis, p. sp. 38-48 \times 5 (apice usque ad 8 μ . cr.), octosporis, supra rotundatis, brevissime pedicellatis; sporidiis hyalinis, levibus, distichis v. oblique mono-

stichis, septo delicato, non constrictis, ellipsoideis, $6,5 \approx 3$; sporulis hyalinis, continuis, ellipsoideis, biguttulatis, rotundatis, $5-6 \approx 3$.

Hab. in stromate Sphæriacearum et Valsacearum, Sao Leopoldo, Rio Grande do Sul Brasilia (J. Rick).

PECKIELLA Sacc. — Syll. II p. 472, IX p. 944, XVI p. 560, XVII p. 780.

1. **Peckiiella hymenioides** Peck, Bull. Torr. Bot. Club XXXIV (1907) 4850 pag 102. — Subiculo tenui, adpresse tomentoso, albo, hymenium hospitii tegente; peritheciis subglobosis, a subiculo plus minusve celatis, e pallide succineis atro-brunneis; ascis angustis, cylindraceis; 8-sporis, $60-80 \approx 5-6$; sporis simplicibus, subfusiformibus, utrinque acutis v. acuminatis, $12-15 \approx 4-5$.

Hab. in hymenio Lactarii uvidi Fr., Newfane Vermont (Miss G. S. BURLINGHAM). — *Peckiiella hymenii* Peck, affinis sed ascis, sporis, subiculo diversa.

2. **Peckiiella hymenii** Peck, N. York State Mus. Bull. n. 116 (1907) 4851 p. 28. — Subiculo albo, supra hymenium et lamellas oblitteratas plus minusve effuso; peritheciis minutis, globosis, in subiculo subimmersis, numerosis, pallide melleis dein ætate obscurioribus; ascis linearibus $240-320 \approx 7-10$; sporidiis monostichis, fusoides utrinque acutatis, hyalinis, $40-45 \approx 6,5-7$, cruciatis massulas albas irregulares formantibus.

Hab. in hymenio Lactarii vellerei, Wading River, Suffolk Co. Amer. bor.

3. **Peckiiella Camphorati** (Peck) Seaver in Mycologia II (1910), tabula XXI, fig. 6, *Hypomyces Camphorati* Peck, New York State Mus. Bull. 1906 n. 105, p. 23. — Subiculo tenui, effuso, hymenium oblitterante, flavo; peritheciis numerosis, minutis, subiculo immersis, ostiolo emergente brunneo; ascis longissimis, $120-150 \mu$. long. (parte sporif.) octosporis; sporidiis monostichis, oblongo-fusoides, continuis, acutis v. interdum utrinque cuspidatis, $12-15 \approx 4-5$.

Hab. in hymenio Lactarii camphorati, Port Jefferson, Suffolk Co. Amer. bor.

4. **Peckiiella lateritia** (Fries) R. Maire, Not. Myc., Ann. Myc. v. IV 4838 (1906) p. 331. — Ita vocanda *Sphæria lateritia* Fries seu *Hypomyces lateritius* (Fr.) Tul. — Syll. II, pag. 468 — a quo, teste Maire l. c., non differunt *Sphæria deformans* Lagg. — Syll. II, pag. 475 [sub *Hypomyc.*] et *Hypomyces Vuilleminianus* Maire — Syll. XVI, p. 560 [sub *Peckiiella*].

SELINIA Karst. — Syll. II p. 457, IX p. 943.

1. *Selinia subtropica* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4854 (1909) p. 404. — Stromate non prominulo matrice dealbata innato, albescente; peritheciis paucis (1-3) stromate infossis, ostiolo fuligineo breviter exerto manifestis, globosis, 0,75-2 mm. diam.; ascis subellipsoideis pedicellatis, parte spor. 150-180 × 50-90, ped. 50-80 × 10-15, paraphysatis; sporidiis 2-3-stichis 60 × 28, crassiuscule tunicatis, levibus, e hyalino subchlorinis.

Hab. in fimo vaccino putrescente in collibus prope Salba Argentina Amer. austr. — *S. pulchra* (Wint.) Sacc. peraffinis, sporidiis tamen apice non acutatis stromateque pallido non verrucoso recedens.

POLYSTIGMA Pers. — Syll. II p. 458, IX p. 945, XIV p. 625, XVII p. 780.

1. *Polystigma Adenostomatis* Farl. in Eil. et Dearn. Fungi Columb. 4855 (1905) n. 2049. — Peritheciis amphigenis, congregatis, ovoideis, 280 × 140, folii substantiæ decoloratæ purpurascenti immersis; contextu aurantiaco; ascis octosporis, elongato-ellipsoideis, 56 × 16; sporidiis ovoideis, hyalinis, 14 × 5-6; paraphysibus simplicibus, lineari-clavatis, 3-4 μ cr. aurantiacis.

Hab. in foliis vivis *Adenostomatis fasciculati*, S. Matio, California Americæ borealis (C. H. THOMPSON).

2. *Polystigma Haræanum* Sacc., in Ann. Mycol. X (1912) p. 311. — 4856 Stromatibus subcutaneis, hinc inde dense gregariis, minutis, intus et extus amœne roseis, longitudinaliter oblongis v. irregularibus 0,5-1 mm. long., 0,5 mm. latis, epidermide tumidula levi velatis; loculis copiosis, immersis, globosis, minutissimis, 50-60 μ . diam. ostiolis non v. vix visibilibus, pariete minute et tenerrime celluloso, cellulis 4-5 μ . diam.; ascis fusoides, subsessilibus, apice obtusis lumineque bifoveolato præditis, 28-32 × 5,5-6, octosporis, pseudoparaphysibus (ascis immaturis) tereti-fusoidis obvallatis; sporidiis oblique monostichis, oblongo-fusoides, utrinque obtusulis, sæpius 4-guttulatis, 7-8 × 2,5, hyalinis.

Hab. in culmis emortuis *Phyllostachydis* sp. in Japonia. Legit et communicavit A. KANESUKE HARA, 1911.

Sect. 2. Phæosporæ.

SPHÆRODERMA Fuck. — Syll. II p. 459, IX p. 949, XI p. 355, XIV p. 627, XVI p. 562, XVII p. 781 (*).

1. *Sphæroderma microsporum* von Höhnelt, Ann. Mycol. III (1905) 4857 p. 327. — Peritheciis superficialibus v. semiimmersis, sparsis, c. 200 μ . cr., sphæroideo-piriformibus, collo 100 μ . cr., nigris; contextu molli, subtenui, obscure brunneo, distincte parenchymatico; ascis numerosissimis, cylindraceis, 60 \approx 5-6, basi longe attenuatis acutatis, octosporis; paraphysibus numerosis, filiformibus; sporidiis obscure brunneis, late ellipsoideis 1-2-guttulatis, 4,5-7 \approx 3,5-4.

Hab. in ligno putri Fagi silvaticæ prope Pressbaum Wiener Wald Austriæ.

2. *Sphæroderma texanicum* Rehm, Ascom. Amer. bor., Ann. Myc. 4858 v. III (1905) p. 519. — Peritheciis sessilibus in crustulam nigrescentem effusam arcte congregatis, globulosis, haud papillulatis, poro minutissimo pertusis, glabris, modo ad basim hyphis non nullis hyalinis vestitis, mox collabentibus, membranaceis, nigro-fuscidulis, 100-150 μ . diam.; ascis cylindraceis, apice truncatis, c. 100 \approx 14, quadri-octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttis oleosis carentibus, subfuscis, 12 \approx 6-7, strato mucoso tenui obductis, 1-stichis; paraphysibus ramosis.

Hab. ad lignum putridum, Texas (TRECU 1848, comm. Dr. PAZSCHKE). — Secundum texturam mollem peritheci ad *Hypocreaceas*, subiculo nullo conspicuo ad *Sphærodermatis* subg. *Vittadinula* Sacc. pertinens species, *Collematis* instar crustulam præbet. Proximum *Sphærodermati Belladonnæ* Tassi, imprimis peritheciis multo majoribus alienum.

3. *Sphæroderma Rickianum* Rehm in Theissen, in Ann. Mycol. V 4859 (1907) p. 530 et Ann. Mycol. 1910, p. 461-462 c. ic. — Peritheciis 3-20 in acervulos 1-3 mm. latos, 1 mm. cr., brunneo-nigros, ligno nudo insidentibus dense aggregatis, c. $\frac{1}{2}$ mm. diam., vertice griseo-decoloratis, poro latiuscule pertusis, strato stupposo compactiusculo (ex hyphis brunneis, septatis, 5 μ . cr. efformato) insiden-

(*) Ad pag. 781 vol. XVII (*Sphæroderma aureum*); pro «Peritheciis atro-brunneis» corrige: «aureo-brunneis».

Syll. fung. XXII (X-1912)

tibus eoque circum circa, excepto vertice, vestitis, hyphis radiantibus usque ad 240 μ . longis; ascis recte cylindræis, supra rotundatis infra breviter pedicellatis, 130-150 \times 13, octosporis; sporidiis obscure brunneis, continuis, fusoidæo-ellipsoideis, plano-convexis, utrinque attenuato-rotundatis, 23-26 \times 10-12, strato mucoso angusto cinctis.

Hab. in lignis decorticatis, Sao Leopoldo Rio Grande do Sul Brasilia. — A genere *Rosellinia* recedit contextu molli peritheci.

4. *Sphæroderma argentinense* Spegazz., An. Mus. Nac Buenos Aires 4860 t. XIX (1909) pag. 405. — Peritheciis sparsis v. hinc inde laxè gregariis, globosis, 200-250 μ . diam., subiculo tenuissimo concolore parcissimo cinctis; ascis ellipsoideis longiuscule pedicellatis, p. sp. 50-60 \times 30-40, mox diffuentibus, octosporis; sporidiis ellipsoideo-limoniformibus, fuligineis, 20-25 \times 15-16, levibus.

Hab. ad rhachides putrescentes Musæ sapientum, La Plata Rep. Argentina Amer. austr. — *Sph. bulbifero* Berl. affinis species, sporidiis brevioribus crassioribusque tamen distincta.

5. *Sphæroderma epimyces* von Höhnelt, Fragm. z. Mykol., Sitzb. k. 4861 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 103. — Peritheciis gregariis, globosis, astomis epapillatis, primum flavidis dein sordide brunneolis, circ. 310 μ . diam., primum plus minus immersis dein superficialibus, subliberis; contextu peritheci crassiusculo, carnosio, flavo, grosse parenchymatico; ascis apapillatis, octosporis ovoideo-piriformibus, clavatis, tenuiter tunicatis, supra late rotundatis, basi breviter crasseque stipitatis, 80-92 \times 28-32; sporidiis confertis, unilocularibus, late citriformibus, depressis, sectione subellipsoideis, e pallide griseo-violaceis v. obscure olivaceis opace nigris; utrinque breviter cylindræo-appendiculatis, sæpe angulosis, multiguttulatis, 24-28 \times 13-18 \times 11-12.

Hab. parasitice in stromate *Hypomyces* ochracei prope Pressbaum Austriæ inf. — *Sph. episphaerio* (Ph. et Pl.) affine sed caracteribus peritheciarum sporidiorumque diversum.

6. *Sphæroderma hypomyces* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. 4862 Ak. d. Wis. Wien Bd. CXVI, Abt. I (1907) p. 102. — Subiculo arachnoideo, tenui, evanido; peritheciis globosis, liberis vel basi adnatis, astomis epapillatis, sparsis v. confertis, pallide ochraceo-flavis, dein pallide brunneolis, 400-550 μ . diam. extus glabris, levibus v. parce pilosulis (pilis hyalinis 50 \times 2-4); contextu peritheci crassiusculo, carnosio, flavo, parenchymatico (cellulis usque ad

25 μ . latis); ascis aparaphysatis, tenuiter tunicatis, clavatis, basi breviter stipitatis, octosporis, 80 \times 16-20; sporidiis distichis v. confertis, griseo-nigris, multiguttulatis, unilocularibus, fusoidis. utrinque obtusis, lateraliter depressis, 20-21 \times 8 \times 7.

Hab. parasitice ad lamellas Lactarii pergameni, prope Pressbaum Austriæ inf. — Subiculum arachnoideum saltem partim *Hypomyceti* pertinens.

7. *Sphaeroderma Wentii* (Koord.) Sacc. et Trott., *Melanospora Wentii* 4868 Koord., Botan. Untersuch. (1907) pag. 172, fig. 11 et tab. XII fig. 18. — Peritheciis hyalinis erostratis, in subiculo effuso arachnoideo sublibere insidentibus, globulosis 250-270 μ . long. et 220-240 μ . latis; ostiolo conico 90-100 μ . longo, apice mutico; ascis 4-8-sporis; sporidiis ellipsoideis, continuis, fuscis, 25-25,5 μ . longis et 15-18 μ . latis.

Hab. in foliis emortuis Fici elasticæ pr. Purworedjo prov. Kedu ins. Java (KOORDERS).

SPHÆRODERMELLA v. Hönel ad int., Fragm. z. Mykol., III Sitzb. k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 105, *Sphaerodermatella* Seaver, Mycologia I, p. 182. Dignoscitur a *Sphaerodermate* ostiolo setuloso et sporidiis muco obvolutis. — Huc spectant: *Sphaeroderma Helleri* (Earle) Sacc. — Syll. XVII, p. 781 — et *Rosellinia Niesslii* Auersw. — Syll. II, p. 270.

CREOSPHERIA Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 396 (Etym. *creas* caro et *Sphaeria*). — Perithecia singula v. in stroma commune juncta, erumpentia, dein libera, basi vix innata, atra, non carbonacea, contextu medio carnosomolli; ascis cylindraceuti, 8-sporis paraphysati; sporidia brunnea continua; paraphyses simplicies filiformes. — Genus *Rosellinice* proximum, contextu carnosostromatibusque compositis recedens; sed verisimilime idem est ac *Sphaeroderma*.

1. *Creosphaeria riograndensis* Theiss., l. c. pag. 396. — Peritheciis 4864 erumpentibus, corticis laciniis cinctis, demum liberis, basi breviter innatis, atris, conoideis, 1-1,5 mm. diam., superficie rimosa, levi, contextu sanguineo, carnosopariete peritheciali crassiusculo compacto atro; stromatibus compositis, pulvinulos 2-3 mm. latos, pluriloculares (raro strata magis effusa sistentibus) rotundatos, rimosorugosos, parce minuteque papillatos, ætate poro umbilicato et perithecia plerumque 3-6 globosa vel applanata 900-1400 μ . diam.

continentes, cortice epidermali communi tectos formantibus; ascis anguste cylindraceis, longissime (usque ad 120 μ .) pedicellatis, p. spor. 88-100 \approx 5-5,5; paraphysibus copiosis eseptatis, filiformibus, 2 μ . cr.; sporidiis octonis, ellipsoideis, 8,5-12 \approx 3,8-4,6 v. oblongis 13 \approx 3,5, brunneis, rectis, utrinque rotundatis, 1-2-guttulatis.

Hab. ad cortices emortuos, Sao Leopoldo Rio Grande do Sul Brasilæ.

NIGROSPHÆRIA N. L. Gardner, Univ. California Publ. Bot. v. II (1905) n. 6, p. 179, pl. XVIII (Etym. *niger* ob sporidia atra). — Mycelium parasiticum, ex hyphis parvis albis in contextum sub-hymeniale matricis penetrantibus formatum. Perithecia sphærica absque ostiolo, e singulo filamento erecto myceliali oriunda, excipulo albo, glabro. Asci late clavati, aparthysati; sporidia continua, oblonga, brunnea v. nigricantia. — Huc pertinet *Sphæria* (*Hypocrea*) *Setchellii* Harkness — Sacc., Syll. XVI, p. 564 (sub *Melanospora*). Verisimiliter genus *Nigrosphæria* a *Sphærodermate* non satis differt.

MELANOSPORA Corda — Syll. II p. 461, IX p. 950, XI p. 356, XIV p. 626, XVI p. 563, XVII p. 781.

1. *Melanospora rhizophila* Pegl. et Sacc. sp. n. — Peritheciis sub-4865
sparsis v. gregariis, minutissimis, superficialibus, globulosis, 150-200 μ . diam., in ostiolum cylindraceum, 160 \approx 30, apice fimbriatum abrupte tenuatis, hinc phialiformibus, glabris, luce directa nigricantibus, contextu vero tenuiter carnosulo, sordide roseo, peritheciis minute parenchymatico, ostioli prosenchymatico; ascis ovato-oblongis 50-55 \approx 20-22 subsessilibus, octosporis, aparthysatis mox evanidis; sporidiis distichis ellipsoideo-limoniformibus, h. e. utrinque apiculatis, primo brunneis, grosse 1-guttatis, dein fuliginis.

Hab. in radicibus putrescentibus Cucurbitæ Peponis, Ferrara, Ital. bor., socia *Fusarii* specie, forte ejusdem status conidiophorus (V. PEGLION). — Affinis *Melanosporæ vervecinæ*, a qua glabritie et minutie omnium partium statim dignoscitur. Perithecia interdum etiam intra radículas putres matricis inveniuntur.

GIBSONIA Masee, Ann. Bot. XXIII (1909) p. 336 et Trans. Brit. Mycol. Soc. III (1910) p. 221 (Etym. a prof. H. GIBSON). — Perithecia subglobosa, superficialia, membranacea, olivacea, ostiolo longe cylindraceo apice fimbriato prædita. Asci octospori facile dif-

fluentes; sporidia continua brunnea, ellipsoidea, in massam mucosam eructata. — An satis diversum genus a *Melanospora*?

1. *Gibsonia phæospora* Masee, l. c. cum fig. in textu. — Peritheciis 4866 sparsis 1 mm. alt, subglobosis olivaceis glabris, hyphis basi repentibus, in longum ostiolum abrupte desinentibus; contextu parenchymatico ex cellulis polygoniis composito; ascis cylindricis, sporidiis monostichis, ellipsoideis, brunneis, continuis 14-15 \times 7-8.

Hab. in massa decomposita Saprolegniarum, rarius in Lancashire Britannia (Prof. H. GIBSON).

HYPOXYLINA Starb., Ascom. Schw. Chaco-Cordill. Exp. Arkiv. f. Bot. Bd. V (1905) p. 29 (Etym. ab *Hypoxylon*, cujus est analogon genus). — Stroma pulvinatum vel pulvinato-effusum, tenue; perithecia acervulatum conjuncta, contextu carnosissimo prosenchymatico nectrioideo; sporidia continua, ellipsoidea, fusca. — *Hypoxylon* primo obtutu in memoriam revocat sed texturâ mollissima, sub lente, si tenuissime præparata, lilacino-vinosa, genus facile Hypocreaceis adscribendum; a *Penzigia* peritheciis semilibris vel basi tantum conjunctis nec non textura plane differt.

1. *Hypoxylina umbilicata* Starb., l. c. p. 29. — Acervulis peritheciis 4867 stromate basilari coninuctis et insidentibus, sparsis, hemisphaericis vel tuberculatis, denique applanatis, interdum confluentibus et effusis, orbicularibus, 1-2 mm. diam. vel oblongatis, 1-3 \times $\frac{1}{2}$ -2 mm., circa 1 mm. altis, ad basim pilis parvis, fuscis, septatis, 5 p. crassis obsessis; peritheciis sphaerioideis, papilla discoidea, profunde nigro-umbilicata ornatis, villo furfuraceo fusco-ferrugineo, deinde lateritio-fusco omnino vestitis, textura carnosissima vel vix carnosocoriacea, densissime prosenchymatica vel subparenchymatica, sub lente fusco-nigra, sed tenuissime præparata lilacina, 500-600 μ . diam.; ascis lineariter cylindræis, sursum obtusatis, longe pedicellatis, 89-101 \times 9-10 (p. sp.); sporidiis octonis, monostichis, saepe imbricatis, ellipsoideis, inæquilateralibus, vetustis navicularibus, utrinque acutiusculis, primo hyalinis biguttulatis, deinde fuscis; paraphysibus parvis, filiformibus, diffuentibus.

Hab. in ramulis aridis arboris «algorobo» nominati ad rio S. Francisco, prov Jujuy Argentina et in ramulis *Mimosa* sp., Gran Chaco, Tatarenda Bolivia.

WAWELIA Namyslowsky, Kosmos XXXIII (1908) p. 330; Bull. Ac. d. Sc. de Cracovie 1908 pag. 597, 6 fig. (Etym. a Monte Wawel

Cracoviæ, ubi est castrum olim sedes regum polonicorum et ubi fungillus detectus est). — Stromata cylindraceo-conica, plerumque simplicia, alba, carnosa, matrice leviter infixa, demum flavescenti brunneola. Perithecia concoloria in parte media stromatis superficialia, globoso-conica, satis conferta numerosa, stromatis basim et sæpe quoque apicem nuda relinquentia; asci cylindracei, paraphysati, 4-spори; sporidia ovoidea, continua, nigricantia, levia. Conidia adsunt. — Genus insigne, habitu *Racemellæ* (Cordyceps).

1. *Wawella regia* Nam., l. c. — Characteres generis; stromatibus 4868 gregariis, sæpius basim et apicem versus tenuatis, 5-12 mm. alt., 1-2 mm. cr.; peritheciis prominentibus obtuse papillatis, pertusis, 240-300 μ . diam., hyphis filiformibus conidiophoris confertiusculis ascendentibus vestitis; ascis 60-80 μ . long., apice rotundatis, deorsum sensim tenuatis, paraphysibus multi-cellularibus, duplo longioribus, crassiusculis obvallatis, tetrasporis; sporidiis monostichis, ovoideis, livido-nigricantibus, 6-8 \times 4-6; conidiis singulis v. gregatis acrogenis, achrois, ovoideis, 4-6 \times 2.

Hab. in fimo Cuniculorum Cracoviæ, Polonia.

COLLETOMANGINIA Har. et Patouill., C. R. Acad. Fr. CXLII (1906) p. 224-226, Bot. Centralbl., CI (1906) n. 24, pag. 632 (Etym. a coll. COLLET et MANGIN). — Stroma hemisphæricum, cavum, magnum, superficie alveolato-excavatum, fere *Morchellæ* ad instar, carnosum, pallidum; perithecia in fundo areolarum immersa, phialiformia, collo longiusculo in ostiolum vix emergens dehiscencia, carnosa, nigricantia; asci filiformi-paraphysati, cylindracei, apice jodo colorati, octospori; sporidia ovoidea, continua, nigricantia. — Genus anceps inter *Xylariaceas* molliores et *Hypocreaceas* medium, habitu vero *Helvellacearum*.

1. *Colletomanginia paradoxa* Har. et Pat., l. c. p. 224. — Characteres 4869 generis; stromate 17 cm. diam., alveolarum cristis 2-3 cm. alt.; peritheciis in fundo areolarum ab eis denigrato 3-4 seriatis; ascis 190 \times 20; sporidiis 18-24 \times 12-15.

Hab. ad truncos *Abietis pectinatæ* in Afr. orient. britannica.

Sect. 3. Hyalodidymæ.

CHARONECTRIA Sacc. — Syll. II p. 466, IX p. 953, XVI p. 1140, XVII p. 782.

1. *Charonectria succinea* (Rob. et Desm.) Sacc. — Syll. IX p. 953 — 4870
var. *bractearum* Sacc., Ann. Mycol. VI (1908). — A typo vix differre videtur ascis cylindraceis nec vere clavulatis et loco.

Hab. in bracteis languidis v. emortuis Carpini Betuli, Rigny sur Arroux Galliae (FLAGOLET). — Asci 68-80 \times 8; sporidia oblique monosticha, 8,5-11 \times 5-5,5, hyalina, 1-septata non constricta, hyalina; contextus peritheciï fulvo-melleus.

2. *Charonectria fimicola* v. Höhn., Oest. Bot. Zeitschr. LV (1905) 4871 p. 22, Rehm, Ascom. exsicc. n. 1587. — Peritheciis piriformibus 250-300 μ . latis, 400 μ . alt., rostello 165 μ . long., 140 μ . cr. præditi, plerumque omnino immersis et rostello prominentibus, subhyalinis v. flavido-albis, siccis sordide flavidis, nucleo rubido præditi, parietibus 30 μ . cr., e cellulis parenchymaticis 6-20 μ . cr. constitutis, extus levibus; ascis numerosis, cylindraceis 100-120 \times 5-6, octosporis; sporidiis rectis, monostichis, pallide flavo-aurantiacis, tenui-tunicatis, late ellipsoideis, septatis ibique parum constrictis, extus longitudinaliter striatis, 10-13 \times 5-5,5; paraphysibus paucis filiformibus, 2-3 μ . cr.

Hab. in fimo Damæ vulgaris sub vitro servato ex Sparbacher Tiergarten, Wiener Wald Austriæ.

NECTRIA Fr. — Syll. II p. 479, IX p. 955, XI p. 357, XIV p. 628, XVI p. 565, XVII p. 778. — Cfr. v. Höhn., Ann. Myc. VIII (1910) p. 464.

I. *Eu-Nectria* Sacc.

1. *Nectria tucumanensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4872 (1909) p. 407, cum icone. — Peritheciis cæspitosis erumpenti-superficialibus sordide rubris coriaceo-carnosulis, stromate parciissimo insidentibus, udis globosis 250-300 μ . diam., ostiolo obscuriore vix papillato ornatis; ascis subfusoides breviter pedicellatis 90-120 \times 20-40, paraphysatis v. non, octosporis; sporidiis suballantoideis medio septatis, loculis facile secedentibus, hyalinis, 35-40 \times 12-15.

Hab. ad ramos dejectos putrescentes *Anonæ Cherimoliæ* nec non *Celtidium* in sepibus circa Tucumán, Argentina Amer. austr. — Species eximia sporidiorum articulis facile secedentibus ad *Hypocream*, *Bresadollem* v. Höhn. nec non *Neorehmiam* v. Höhn. præcipue accedens.

2. *Nectria oculata* v. Höhn. Fragm. Mykol. IX in Stzb. k. Ak. d. 4873
Wiss. Wien CXVIII (1909) Abt. I, p. 1475. — Peritheciis gregariis, superficialibus, solitariis v. seriatis, stromate visibili nullo, globosis 400-450 μ . latis, obscure cinnabarinis, e nitidulo subopacis, ostiolo depresso, rotundato 10-12 μ . lato, papilla depressa nitidula, e rubro-brunneo nigricante 180 μ . lata prædito; membrana perithecii parenchymatica 35-45 μ . cr.; paraphysibus parvis, filiformibus, diffluentibus; ascis tunica tenuissima præditis, cylindraceis, octosporis, 80-86 \times 6-8; sporidiis recte v. oblique monostichis, hyalinis, levibus, elongato-ellipsoideis, sæpe lateraliter depressis, rectis, apice vix angustatis obtusulis, plasmate indistincte quadripartito, ad septum medium tenue non costrictis, 12-13 \times 5,5-6.

Hab. in ramis *Albizziae moluccanæ* (?) in horto bot. Buitenzorg in ins. Java. — *N. mammoideæ* Plowr. affinis.

3. *Nectria vicina* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 4874 p. 408. — Peritheciis globosis 180-200 μ . diam. aurantiacis, minute papillato-ostiolaris, erumpenti-superficialibus, 3-5-gregariis, carnosulis; ascis obclavatis, brevissime pedicellatis, 90-100 \times 20, paraphysibus grosse articulatis cinctis; sporidiis cylindraceis, rectis v. vix inæqualiter, non constrictis, hyalinis, 30 \times 10.

Hab. ad ramos emortuos *Serjanie* cujusdam, Parque Roca, Tucumán, Argentinae Amer. austr. — *N. tucumanensi* Speg. simillima et facile ejusdem varietatem sistens, peritheciis aurantiacis sporidiisque minoribus et loculis non secedentibus satis distincta.

4. *Nectria diversispora* Petch, Ann. Roy. Bot. Gard. Peradenya III 4875 Pt. I (1906) p. 4. — Peritheciis 0,25 mm. diam., solitariis v. agglomeratis, nullo stromate, rubris, subdiaphanis, granulatis, ostioli conoideis, ochraceis; paraphysibus linearibus; ascis 80-100 \times 10-15; sporidiis oblique monostichis, hyalinis, 11-13 \times 4-5, uniseptatis, medio constrictis, strictis, ovatis, apicibus obtusis, loculis sæpe inæqualibus, apicibus sæpe rotundatis.

Hab. in ligno emortuo *Heveæ brasiliensis* et in ramis emortuis *Theæ viridis*, Ceylon.

5. *Nectria Castilloe* Turconi et Maffei, Atti Ist. Bot. Univ. Pavia 4876 ser. II, p. 332, tab. XII, fig. 2. — Peritheciis compluribus, in

hypostromate carnosulo, pulvinato, pallide flavido insidentibus, dense aggregatis v. parum discretis, in cæspitulos obscure rubro-carneos, pulvinato-verruciformes, rotundatos, quandoque irregulariter radiatim subcirculares erumpentibus, superficialibus, ovatis v. ovato-globosis, $250-300 \times 150-250$; contextu pseudoparenchymatico rubro incarnato; ascis e fundo peritheci irradiantibus, cylindræis v. subclavatis, aparaphysatis, $60-80 \times 15-20$, octosporis; sporidiis oblique monostichis, rariter subdistichis, ellipsoideis, utrinque rotundatis, medio uniseptatis, 10×3 , hyalino-fuscidulis.

Hab. in ramis Castilloæ elasticæ, Mexico Amer. bor. — Adest quoque status conid. formam *Fusarii* sistens; sporodochiis initio cortice tectis, dein erumpentibus, pulvinatis v. pulvinato-verruciformibus, flavido-albis; conidiis fusoides, plerumque arcuatis, rariter subrectis, utrinque acutatis, $4-8$ -septatis, $60-90 \times 4-6$, hyalinis, conidiophoris perexiguus suffultis.

6. *Nectria seminicola* Seaver, Mycologia I (1909) pag. 21, tab. II, 4877 fig. 59. — Peritheciis cæspitosis, cæspitibus minutis, confluentibus, interdum seminis superficiem totam occupantibus; peritheciis subglobosis ostiolo minuto papillato præditis, glabris v. subglabris, 250μ . diam., aurantiacis, senio aureo-flavis v. albidis; ascis clavatis, $40-50 \mu$. long., octosporis; sporidiis pro more 2-seriatis v. irregulariter positis, hyalinis, 1-septatis, subconstrictis, $10-14 \times 3-3.5$.

Hab. ad semina partim putrida *Spathyemæ* fœtidæ, New York Amer. bor. — Status conidiophorus (*Dendrodochii* spec.): mycelio albo, stromata dein purpurascentia formante; conidiophoris erectis, arrecto-ramosissimis apice conidia hyalina ellipsoidea $5-7 \times 2-3$, uni-biguttata gerentibus.

7. *Nectria bogoriensis* Bernard, Bull. Dép. Agric. Neerland. XI (1907) 4878 p. 45, fig. 58-61. — Peritheciis hypostromate pulvinato, irregulari, obtuse papillatis, ex hyphis laxè intertextis, carneis formato suffultis, globoso-piriformibus, 200μ . lat. e viridi rubro-aurantiis, contextu pseudoparenchymatico ex unico cellularum strato denso confato; ascis octosporis aparaphysatis, fusoides, subsessilibus, apice obtusulis, $50-55 \times 8-9$; sporidiis ellipsoideo-oblongis, utrinque obtusulis, medio 1-septatis, constrictis, hyalinis, $10-12 \times 4-5$.

Hab. in caulibus *Vanillæ* spec. Tjikeumeuh ins. Javæ. — Forte species noxia. Dimensiones ex iconibus petita.

8. *Nectria fallax* Rick, Fungi austro-amer. III-IV, n. 44, Ann. Myc. 4879 v. IV (1906) p. 309. — Peritheciis aggregatis $\frac{3}{4}$ mm. diam., orbicularibus, luteo-succineis, furfure stramineo conspersis, ostioliis

minutis obtusis vitreis; ascis linearibus 100×10 , facile diffuentibus; sporidiis octonis, ovalibus vel cylindraceis, valde inæqualibus $8-16 \times 6-9$ biguttulatis, in septo vix compressis, olivaceis, mucu tenui obvallatis, exosporio crasso striis longitudinalibus irregularibus pictis; paraphysisibus nullis.

Hab. in ligno frondoso, São Leopoldo, Brasilia. — A ceteris speciebus sporidiis irregulariter striatis dignoscenda.

9. *Nectria betulina* Rehm, Ascom. Amer. bor., Ann. Myc. vol. III 4880 (1905) p. 519. — Peritheciis in stromate flavidulo, 1,5 cm. long., 2-3 mm. lat. per rimas transversas corticis erumpente arcte congregatis, sessilibus, globulosis, haud papillulatis, poro vix conspicuo pertusis, demum patellariformiter collabentibus, dilute carneis, haud nitentibus, scabriusculis, contextu parenchymatico flavidulo 0,3-0,4 mm. diam., membranaceis; ascis cylindraceis, apice rotundatis, $50-60 \times 8-9$, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis, non constrictis, utraque cellula guttam magnam oleosam includente, hyalinis, $9-10 \times 4$, 1-stichis; paraphysisibus haud visibilibus.

Hab. ad lignum betulinum, Cajuga Lake Flora New York Amer. bor. (Dr. ATKINSON). — *Nectria ochraceæ* forte proxima, sed sporidiis multo minoribus plane diversa.

10. *Nectria leprosa* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 112. 4881 — Cæspitulis 1-2 mm. diam.; peritheciis dense cæspitosis, flavido aurantiis, ovoideis v. subglobosis, papillatis, c. 300 μ . diam., squamis furfuraceis, pallidis vestitis; ascis clavatis, vertice rotundatis, octosporis, $80-100 \times 14-20$; sporidiis oblongis, rectis vel curvulis, subdistichis, utrinque obtuse rotundatis, biguttulatis, medio 1-septatis, $24-32 \times 8-10$, ex hyalino subflavidulis.

Hab. ad cortices arborum, Amani Usambara or. Africae centr. (EICHELBaum).

11. *Nectria amaniensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4882 p. 112. — Cæspitulis subglobosis, firmis, c. 1-2 mm. diam.; peritheciis dense aggregatis confluentibusque, papillatis, rufo-brunneis; ascis cylindraceo-clavatis, obtusis, 2-guttulatis, medio 1-septatis, constrictiusculis, hyalinis, $9-12 \times 4-5$; conidiis ellipsoideis, hyalinis, $5-6 \times 2,5-3$.

Hab. in ramis siccis Amani Usambara orient. Africae centr. (EICHELBaum).

12. *Nectria coccineo-nigra* Starb., Ascom. Schwed. Caco-Cordill. Exp., 4883 Arkiv f. Bot. Bd. V (1905) p. 8. — Stromatibus immersis, erum-

pentibus, pulvinatulo-applanatis, basi paullum contractis, gregariis, interdum confluentibus, intus aurantiaco-luteis, acervulos orbiculatim vel polygone determinatos efficientibus, 1-3 mm. diam.; peritheciis superficialibus, 2-50 densissime aggregatis, plane fere inter se liberis vel basi confluentibus, sphaerioideis vel subovoideis, pulcherrime verruculosi, primo aurantiaco-coccineis, distincte obscurius fere nigro-papillatis, deinde rubro-fuscescentibus vel nigro-purpureis, 250-300 μ . diam., textura hypocreacea; ascis octosporis forma maxime varia, fusiformibus vel cylindraneo-clavatis, vel (ob sporidia conglobata) oblongatis 57-65 \times 10-12; sporidiis mono-distichis, interdum conglobatis, ellipsoideis, medio septatis, non vel vix constrictis, episporio crasso, distincte oblique et undulatum striato, loculis crasse guttulatis, 12,5-15 \times 6-7,5; paraphysibus nullis (?).

Hab. in ramulis aridis, Gran Chaco, Tatarenda Bolivia. — *N. hematochromæ* Speg. quam maxime affinis; differt tamen ostioliis, situ et forma sporidiorum; inter Nectrias sporidiis striatis bene distincta.

13. *Nectria asperata* Rehm, Asc. Exsicc. fasc. 43, n. 1816 et Ann. 4884

Mycol. VII (1909) p. 137. — Peritheciis sessilibus, plus minusve arcte congregatis, globosis, minutissime umbilicatis, poro perspicuo pertusis, mox urceolato-impressis, 0,25-0,3 mm. diam., aurantiaco-rubris v. coccineis, glabris, haud nitentibus, siccis scabris; peritheciis membranaceis e cellulis permagnis, suborbicularibus, 18-20 diam. compositis; ascis fusiformibus c. 70 \times 10, 8-sporis; sporidiis ellipsoideis medio septatis, vix constrictis, utraque cellula magniguttata, hyalinis, 12-15 \times 5(-7), distichis paraphysibus filiformibus 3 μ . lat.

Hab. ad corticem plantæ indetermin., Sao Leopoldo Rio grande do Sul Brasilæ (THEISSEN). — *Nectr. cinnabarinæ*, *Nectr. Veuillotianæ*, *Nectr. illudensis* variis characteribus proxima.

14. *Nectria cæspiticia* Syd., in de Wildem., Flora Bas-Moy. Congo 4885

t. III, fasc. I (1909) Extr. p. 14. — Peritheciis stromate pulvinato 1-2 mm. diam., cæspitosim insidentibus et dense confertis, globulosis, tandem centro leniter collabascentibus, minute papillatis, c. 200 μ . diam. verrucosis pro ratione majusculis ochraceis ubique denseque tectis; ascis fusideo-clavatis, 45-55 \times 18-15; sporidiis distichis, oblongis, utrinque obtusis, medio septatis, non v. leniter constrictis, hyalinis, 24-32 \times 8-12.

Hab. in cortice arboris cujusdam Kisanu Congo Afric. trop.

(VANDERYST).

15. *Nectria cinnabarina* (Tode) Fr. — Syll. II, p. 479 — var. *jara-* 4886
guensis v. Höhnelt, Ergeb. Bot. Exp. Südbas. 1901, Denk. k. Ak.
 d. Wiss. Wien Bd. LXXXIII (1907) Extr. pag. 18. — A typo
 differt peritheciis 600-650 μ . diam.; sporidiis pallide rubidis, ro-
 tundato-ellipsoideis 14-17 \times 6,5-7; ascis 90-98 \times 7-8.

Hab. in cortice rami cujusdam emortui, Jaraguaberg Sao Paulo
 Brasilia.

16. *Nectria Noackiana* Syd., Ann. Mycol. V (1907) p. 358. — Peri- 4887
 theciis erumpenti-superficialibus, in glomerulos minutos 1-2 mm.
 latos 5-30 densissime caespitosis, stromate minuto, hemisphaerico,
 e globoso ovatis v. subpiriformibus, in sicco semper distincte col-
 labascentibus et pezizoideis, cinnabarinis, dein fuscidulis, glabris,
 ca. 200-300 μ . diam.; ascis cylindraneo-clavatis, apice rotundatis,
 basi attenuatis, 55-80 \times 10-13, octosporis; sporidiis irregulariter di-
 stichis, oblongis vel oblongo-elongatis, utrinque rotundatis, rectis
 vel leniter inaequilateris, medio 1-septatis, vix constrictis, hyalinis,
 guttulatis, 17-28 \times 6-9.

Hab. in cortice plantæ scandentis cujusdam, Araraquara, Prov.
 Sao Paulo, Brasilia.

17. *Nectria lunulata* von Höhnelt, Ergeb. Bot. Exp. Südbas. 1901, 4888
 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 19.
 — Peritheciis hypophyllis in maculis indistinctis insidentibus, va-
 riabilibus plus v. minus arcte confertis, greges 0,5-3 mm. diam.
 efformantibus, in stromate superficiali tenui indistincte insidenti-
 bus, griseo-brunneolis, membranaceo-coriaceis, irregulariter globo-
 sis, ovoideis, minute papillatis, 200-250 μ . diam.; contextu obscure
 flavo-brunneo, grosse parenchymatico; ascis clavatis, sessilibus,
 tunica crassiuscula præditis, 70-92 \times 9-10, octosporis, paraphysibus
 filiformibus numerosis obsitis; sporidiis distichis, fusoides, utrin-
 que acutatis v. obtusiusculis, minute multiguttulatis, rectis sed
 plerumque falcatis v. lunulatis, 17-20 \times 3-5.

Hab. in pagina inf. foliorum Smilacis sp., Parnahyba Sao
 Paulo Brasilia. — Pycnidia immixta (*Zythia* sp.), sporulis numerosis
 globosis v. elongatis, 1-2 μ . cr. prædita. *Nectria Bonanseana* Sacc.
 valde affinis.

18. *Nectria ignea* v. Höhn. Fragm. Myk. IX (1909) in Sitzb. k. Ak. 4889
 Wiss. Wien CXVIII, Abt. I, p. 1475 (corr. *ignia*). — Hypostro-
 matibus plerumque dense gregariis, superficialibus, rubro-aurantia-

cis, membranaceis, usque ad 250 μ . latis, irregulariter rotundatis, margine radiatim fibroso, ex hyphis plectenchymaticis floccosis 3-5 latis, flavis constitutis; peritheciis 1-5 globosis 105-150 μ . latis, 130-160 μ . altis, flammeis, levibus, glabris, apiculo ostiolarum circ. 30 μ . alto, 70 μ . lato; membrana 8 μ . cr. parenchymatica; ascis numerosis fusoides-conoideis, tenuiter tunicatis, sessilibus, 36-48 \times 5-7, octosporis; sporidiis mono- v. distichis, hyalinis, elongatis, apice obtusulis plasmate quadripartito præditis, demum bilocularibus, 8-12 \times 1,8-3; paraphysibus tenuiter filiformibus, mucosis.

Hab. in foliis putrescentibus Bambusæ in silivis Tjibodas in ins. Java.

19. *Nectria Marelliana* Speg., An. Mus. Nac. Buenos Aires t. XIX 4890 (1909) pag. 408. — Peritheciis ovatis 150 μ . diam., in stromate dense constipatis e globoso subhemisphæricis 0,5 mm. diam., rubro-fuscis, carnosulis, glabris; ascis cylindraceis, brevissime pedicellatis paraphysibus grosse articulato-cinctis, 100 \times 10, octosporis; sporidiis oblique monostichis ellipsoideis 14-16 \times 7-8, levibus hyalinis, loculis æquilongis sæpius grosse 1-guttulatis.

Hab. ad thallum vivum Ricæ solæ Casarettoanæ, Hornos prope La Plata Argentina Amer. austr. (C. MARELLI). — A *N. lichenicola* (Ces.) Sacc. peritheciis cæspitosis eximie distincta.

20. *Nectria Eichelbaumii* P. Henn., Engl. Jahrb. XXXVIII (1905) 4891 p. 111. — Stromatibus conidiophoris ceraceo-farinosi, albidis, minutis, hyphis ramosis, hyalinis, c. 1,5-2 μ . cr., conidiis subglobosis, hyalinis, c. 2 μ . cr.; peritheciis cæspitose dispositis, ovoideis vel subglobosis, papillatis, rufo-brunneis, c. 150-180 μ . cr.; ascis cylindraceis, obtusis, octosporis, 60-75 \times 4-6; sporidiis subdistichis v. monostichis, fusoides v. ellipsoideis, obtusis, longitudine obsolete striatis, hyalinis, 8-11 \times 3,5-4.

Hab. in stercore indeterminato in silvis prope Amani, Usambara orient. Africæ centr. (EICHELBAUM).

II. *Dialonectria* Sacc.

21. *Nectria Papilionacearum* Seaver, Mycologia I (1909) p. 62, t. IV, 4892 fig. 7, tab. V, fig. 19. — Peritheciis hypophyllis, sparsis v. gregariis, hyphis mycelii albis basi cinctis, subconicis, lateritio-rubris v. cinnabarinis, 175-200 \times 150-175, contextu grosse celluloso, cellulis pro more 8-10 μ . diam.; ascis clavatis, octosporis, 75 \times 10;

sporidiis distichis, infra sæpe monostichis, fusoideis, 1-septatis, ad septum constrictis, $15-17 \times 5-6$, loculis 1-pluriguttulatis.

Hab. in foliis Lespedezæ et Rhynchosiz, sociâ *Parodiella*, Missouri et Carolina infer. Amer. bor.

22. *Nectria callispora* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXVIII, 4898

Abt. I (1909) pag. 295, cum icon. — Peritheciis brunneis, opacis glabris, globosis, minute papillatis $400-450 \mu$. diam. sparsis vel 2-3-approximatis non immersis stromate destitutis; contextu ex cellulis globoso-polygoniis $5-6 \mu$. diam. formato; paraphysibus copiosis filiformibus dein deliquescentibus; ascis 7-8-sporis, $100-120 \times 22-28$, raro tetrasporis et tunc 90×13 , clavatis, apice rotundatis deorsum sensim tenuatis; sporidiis ellipsoideis, medio septatis, non constrictis, 2-4-guttulatis longitudinaliter albo-striatis, $20-25 \times 12$, hyalinis (in glycerina violaceo-griseis), quaternis oblique monostichis, octonis distichis.

Hab. in cortice vivo Albizziæ moluccanæ in horto bot. Buitenzorg ins. Javæ. — A speciebus sporidiis striatis præditis bene distincta.

23. *Nectria Theobromæ* Massee, Kew Bulletin (1908) p. 218 et ap. 4894

Bancroft Handb. Diseas. West Ind. Plants 1910, p. 23; Howard West. Ind. Bull. v. II, p. 200; Stockdale, West. Ind. Bull. v. IX, p. 171. — Peritheciis gregariis v. sparsis, superficialibus, ovoideis, levibus, hyphis aurantiacis præditis, rubris, ostiolo minuto parum prominenti, 500μ . altis; ascis cylindræis, pedicellatis, octosporis; paraphysibus septatis, hyalinis, apice leniter incrassatis, 3μ . cr.; sporidiis oblique monostichis, hyalinis, ellipsoideis, uniseptatis, ad septum leniter constrictis, $28-30 \times 8-10$.

Hab. ad ramos Theobromæ Cacao quos valde lædit, Grenada, Trinidad, Dominica, St. Lucia, St. Vincent Americæ centr.

24. *Nectria Strasseri* Rehm, in Strasser Verh. zool.-bot. Ges. Wien 4895

LVII (1907) p. 308. — Peritheciis gregariis, sessilibus globulosis, vix papillulatis, subhyalinis, glabris, ad basim hyphis nonnullis filiformibus, hyalinis, c. $20-25 \times 3$, obsessis, parenchymatice hyalino-contextis, $120-150 \mu$. diam., siccis pezizellæ ad instar urceolatis, dilute flavidulo-succineis; ascis clavatis, tenerrimis, $30-35 \times 5$, octosporis; sporidiis clavatis, medio septatis, utrinque biguttulatis, ad septum non constrictis, hyalinis, $6-8 \times 2-5$; paraphysibus distinctis tenerrimis, filiformibus.

Hab. ad caules siccos Menthæ silvestris in monte Sonntagsberg Austriæ inf. (STRASSER). — *N. inconspicuæ* Starb. affinis

sed præcipue differt sporidiis minoribus. Socia adest etiam *N. fuscidula* Rehm.

25. *Nectria saccharicola* Speg. — Syll. XIV, p. 634 — var. *Acanthaceæ* Rehm, Ascom. Exsicc. fasc. 43, n. 1815 et Ann. Mycol. VII (1909) p. 137. — Peritheciis sessilibus, primitus conoideis, mox urceolatis, minime papillulatis, glabris, dispersis, interdum 2-3 arcte congregatis, dilute roseolis v. subcarneis, interdum aurantiaco-flavis, parenchymatice contextis, 0,15-0,2 mm. diam.; ascis fusiformibus 60-65 \times 10, 8-sporis; sporidiis ellipsoideis, utrinque acutatis, medio septatis, utraque cellula biguttata, hyalinis, 12 \times 5, distichis; paraphysibus nullis.

Hab. ad caules *Acanthaceæ*, Sao Leopoldo Rio Grande do Sul Brasilæ (RICK).

26. *Nectria pezizoides* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 58. — Peritheciis solitariis v. laxe gregariis, globosis, ostiolo infundibuliformi donatis, rubro-miniatis, extus albo-sulphureis, dein discoideo-collabescentibus et pallide flavis, 300-400 μ . diam.; ascis numerosis, fusoides, supra depressis, crasse tunicatis, sessilibus, octosporis, 50-60 \times 6-7; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, medio septatis non constrictis, loculis uni-guttulatis, hyalinis, 12 \times 6; paraphysibus paucis, brevibus.

Hab. in ligno pineo putri prope Gross-Behnitz Germaniæ.

27. *Nectria obscura* Rehm, Ann. Mycol. V (1907) p. 543. — Peritheciis gregariis, sessilibus, fere semiglobosis, glabris, poro perspicuo pertusis, contextu parenchymatico molli, subfusco, 120-150 μ . diam., vix visibilibus; ascis cylindraceis, interdum subfusiformibus, 80 \times 10, octosporis; sporidiis fusiformibus, medio septatis, cellula superiore latiore, utrinque rotundatis, utraque cellula 1-guttata, hyalinis, 12 \times 5-6, plerumque monostichis; paraphysibus subramosis, tenerrimis, septatis, guttulatis, 3-4 μ . latis.

Hab. ad lignum putridum *Quercus*, Bois d'Escheringen Lotharingiæ (R. MAIRE).

28. *Nectria modesta* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 106. — Peritheciis superficialibus, sparsis, v. pauci-gregariis, ovoideo-piriformibus, 170-250 μ . latis, 240-400 μ . altis, sordide brunneo-flavis, ostiolato-papillatis, papilla rotundata 200 μ . alta, 140 μ . lata; contextu basi indistincte parenchymatico, fibroso-plectenchymatico, collo distincte parenchymatico, basi hyphis flavidis 3-4 μ . cr. vestitis; collo levi; paraphysibus numerosis, filiformibus; ascis tenuiter tu-

nicatis, cylindraceis v. subclavatis, 90-100 \times 6-8, octosporis; sporidiis monostichis v. subdistichis, raro distichis, bilocularibus, vix constrictis, elongatis, utrinque rotundatis, omnino granulato-striatis, violaceo-brunneis, biguttulatis, 9-12 \times 4-5.

Hab. in ligno duro Betulæ prope Pressbaum et in ligno putri Carpini prope Untertullnerbach Austriae inf.

29. *Nectria coccinea* (Pers.) Fr. — Syll. II, p. 481. — var. *platy-* 4900
spora Rehm, Ascom. Exsicc. fasc. 43, n. 1813 et Ann. Mycol. VII (1909) p. 137. — Sporidiis medio septatis, oblongis, utrinque valde rotundatis, utraque cellula magni-guttata, ad septum demum subconstrictis, hyalinis, 12-14 \times 8-9.

Hab. in cortice arboris ignotæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (RICK). *Nectr. compressæ* videtur etiam proxima.

30. *Nectria sakanensis* P. Henn., in Voeltzkow Reise Ostafrika III 4901
(1908) p. 28, tab. III, fig. 20. — Peritheciis caespitosis v. sparsis, subglobosis, fusco-papillatis, coccineis verruculosi, 180-200 μ . d.; ascis fusoideo-clavatis apice obtusiusculis, octosporis 45-65 \times 8-12; sporidiis oblique monostichis v. subdistichis, oblongis, obtusis, uniseptatis, vix constrictis, hyalinis, 12-16 \times 5-6.

Hab. ad corticem arborum, Sakana Madagascar. — *N. sanguineæ* Sib. et *N. episphaeriæ* (Tod.) affinis sed peritheciis verruculosi, sporidiis majoribus etc. diversa.

31. *Nectria congensis* Syd., in De Wildem., Flora Bas- et Moy.- 4902
Congo t. III, fasc. I (1909) p. 14. — Peritheciis sparsis v. sæpius 2-15 caespitosim aggregatis, stromate nullo, globosis, non collabescantibus, 200-250 μ . diam., minutissime papillatis, rufo-ferrugineis, minute verrucosis; ascis fusoideis v. cylindraceis, 50-75 \times 7-13, octosporis; sporidiis oblique monostichis v. distichis, ellipsoideo-oblongis, utrinque leniter attenuatis, medio septatis non constrictis, hyalinis, 14-18 \times 5-6,5.

Hab. in cortice arboris ejusdam, Kisanu Congo Africae trop. (VANDERYST).

32. *Nectria lucida* v. Höhn., Sitzb. k. Ag. d. Wiss. Wien CXVIII 4903
Abt. I (1909) p. 298. — Peritheciis solitariis v. caespitulosis, 500 μ . diam., initio læte cinnabarinis, dein coccineis demum brunneo-rubris, glabris, nitidis, globosis, non collabescantibus, minute saturatis papillatis et areolatis, contextu ex cellulis 3-4 μ . diam., solidiusculis formato; ostiolo 16 μ . lat.; paraphysibus paucis diffusis; ascis cylindricis octosporis, 110 \times 7; sporidiis monostichis el-

liptico-fusoideis rectis curvulisve, utrinque obtusulis, hyalinis, medio septatis non constrictis, levibus, quadriguttulatis, 12-16 μ 6.

Hab. in ramis vivis prope Tjibodas insulæ Javæ. — Præcipue peritheciis nitentibus distincta species. In sporidiis punctum atrum ad extremitates septi conspicitur.

33. *Nectria Inocarpi* Patouill., Bull. Soc. Myc. Fr. XXII (1906) p. 58. 4904

— Peritheciis superficialibus, solitariis v. gregariis, stromate nullo, globosis v. ovoideis, papillatim ostiolatis, minutis, 250-300 μ . diam., collabescentibus, obscure rubris, superficie tuberculis obtusis 30-45 μ . altis præditis, contextu cellulis angulato-ovatis, 15-18 μ . diam., aurantiacis formato; sporidiis hyalinis, ellipsoideis, utrinque obtusis, 1-septatis, medio vix constrictis, 12-15 μ 6-7.

Hab. in fructibus putrescentibus inter silvas *Inocarpi* edulis, Tahiti Polynesia.

34. *Nectria imperspicua* v. Höhnelt, Ergeb. Bot. Exp. Südbas. 1901, 4905

Denk. k. Ak. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 18. — Peritheciis solitariis, e flavido pallide brunneolis, globosis, ostiolo papillatis, carnosus, circ. 180 μ . cr.; contextu minute parenchymatico; ascis clavatis, supra attenuato-acutatis, circ. 50 μ 6-9, octosporis; paraphysibus paucis v. nullis; sporidiis hyalinis, bilocularibus, plerumque submonostichis, elongatis, utrinque fere fusoideo-angustatis, utrinque obtusulis, medio non constrictis, rectis v. leniter curvulis, 11-12 μ 2,5-3.

Hab. parasitica in *Panico piloso* inter conidia *Ustilaginoidæ* usambarensis, Barra Mansa in districtu urbis Itapecirica Sao Paulo Brasilia.

35. *Nectria lophiostomacea* Starb., Ascom. Schwed. Chaco-Cordill. 4906

Exp., Arkiv. f. Bot. Bd. V (1905) p. 9. — Peritheciis sparsis v. nonnullis, gregariis, superficialibus, primo fere hyalinis, sphaeroides, deinde pallide ochraceis, collabescentibus, medio sæpissime ostiolo longitudinali compresso, obscuriore costatis, glaberrimis, textura membranacea, intricatim prosenchymatica, cellulis indistinctis, mycelio hyalino, tenuissime crustaceo cinctis, 75-90 μ . diam.; ascis octosporis, clavatis, sessilibus, sursum acutiusculis, 35,5-38 μ 9-10; sporidiis distichis, primo 4-guttulatis, deinde medio-septatis, cylindraceo-fusoideis, utrinque obtusis, hyalinis, 14-15 μ 3,8-4,5; paraphysibus nullis.

Hab. ad caules *Equiseti*, Quinta pr. Laguna de la Brea prov. Jujuy, Argentina. — Peritheciis minutissimis, siccitate (?) lophiostomaceis prædistincta species.

36. *Nectria episphæria* (Tode) Fr. — Syll. II, p. 497 — var. *gregaria* 4907
Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V
(1905) p. 9. — Peritheciis gregariis, interdum cæspitulose aggregatis, interdum nonnullis solitariis, e sphaerioideo compressis vel umbilicatum collabescentibus, sanguineis; ascis cylindræo-clavatis, $75 \times 100 \times 10-12$; sporidiis superioribus distichis, inferioribus monostichis, ellipsoideis, vix medio constrictis, $15-18 \times 6-7,5$.

Hab. supra *Pyrenomycetes* (?), Santa Anna pr. Tarija. — A *Nect. episphæria* et ejus varietatibus magnitudine ascorum et sporidiorum differt; a *N. Leptosphaeria* Niessl sporidiis latioribus, peritheciis gregariis.

37. *Nectria sphaericola* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4908
(1908) p. 128. — Peritheciis dense cæspitosis sed non confluentibus, globosis, $75-100 \mu$. diam., glabris, nitidulis, succineo-rubris, membranaceo-carnosulis; ascis fusoides apice truncatis $60 \times 10-15$; sporidiis ellipsoideis uniseptatis, non constrictis, levibus, hyalinis 16×8 , primo 2-3-guttulatis dein diblastis.

Hab. in stromatibus *Pyrenomycetum* plurimorum ad ramos dejectos putrescentes *Ilicis paraguariensis* prope Campo das Cuias Rep. Argentina Amer. austr. — Notis plurimis *N. episphæriae* accedens sed bene recteque distincta.

38. *Nectria Melanommatis* Syd., Hedwigia XLIX (1909) pag. 79. — 4909
Peritheciis in stromatibus vetustis *Melanommatis* plerumque gregatim insidentibus, mox sparsis, mox dense aggregatis, globosis, $200-275 \mu$. diam., coccineis, vix papillatis, profunde collabentibus, minute granulato-verruculosis; ascis cylindræo-clavatis, octosporis, $50-70 \times 8-11$; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, hyalinis vel hyalino-brunneolis, $11-15 \times 5-7$.

Hab. in stromatibus vetustis *Melanommatis Cæsalpiniae* ad ramos *Cæsalpiniae cearensis*, Pará America austr. (C. F. BAKER).

39. *Nectria Bakeri* Rehm, Ann. Mycol. VI (1908) p. 319. — Peritheciis gregariis, sessilibus, ovoideis, vix papillulatis, carneo-rubris, glabris, oculo nudo vix visibilibus, contextu parenchymatico flavidulo, ca. 100μ . diam.; ascis clavatis, tenerrimis, $40-42 \times 6-8$, octosporis; sporidiis ellipsoideis, medio septatis, constrictisque, utraque cellula biguttulata, hyalinis, $7-8 \times 3$, distichis; paraphysibus filiformibus, vix conspicuis.

Hab. parasitica in mycelio *Meliolæ* paginam superiorem fo-

liorum Cassiæ Hoffmannseggii incolentis, Parâ Brasiliæ (BAKER). — Subaffinis *N. viliori* et *N. pipericolæ*.

III *Lepidonectria* Sacc.

40. *Nectria chilensis* (Speg.) Sacc. et Trott., *Lepidonectria chilensis* 4911
Speg., Fungi Chilenses (1910) pag. 97, cum icon. — Peritheciis numerosis latiuscule gregariis superficialibus sublenticularibus acutiuscule papillato-ostiolatis, minutis, melleo-corneis, superne glabris, ambitu squarruloso-hirtis, 100-150 μ . diam.; ascis subclavulatis brevissime pedicellatis, aparaphysatis, 70 \times 10-12, octosporis; sporidiis oblique distichis, fusoides-navicularibus, medioeribus, 1-septato-constrictulis, grosse 2-4-guttulatis, hyalinis, 24-25 \times 4-4.5.

Hab. in pedunculis emortuis putrescentibus Lobeliæ Tupæ prope Ciudad de Valdivia, Chile Amer. austr.

41. *Nectria tremelloides* Ell. et Ev., Journ. of Myc. II (1886) p. 121. 4912
Seaver in Mycologia I (1909) pag. 53, t. V, f. 3. — Peritheciis gregariis, subglobosis, grosse furfuraceis, aurantiacis, dein pallide flavicantibus, circ. 300 μ ., prope basim mycelio parco albido cinctis; ascis clavatis, 50 \times 7; sporidiis monostichis v. supra partim biseriatis, hyalinis, fusoides, 1-septatis, levissime constrictis, 9-13 \times 3-4.

Hab. in cortice Salicis emortuæ, Louisiana, Canada (LANGLOIS).

42. *Nectria grammicospora* Ferd. et Winge, Botan. Tidsskrift XXIX 4913
(1908) pag. 11, tab. I, fig. 3. — Peritheciis stromate pulvinato, usque ad 4 mm. diam., primo immersis, dein erumpentibus, confertis, basi modo insculptis, facile secedentibus, ellipsoideo-subglobosis, 300-350 \times 200-250, textura carnosulo-membranacea, pallide ochraceis, oculo nudo, præsertim basi, albido-furfuraceis, papilla minutissima nuda instructis; vestimento sub vitro e cellulis subrotundatis, 10-15 μ . diam., hyalinis, laxè junctis, hinc inde in squamulas quasi acervatis, composito; ascis juvenilibus fasciculatis, sursum truncatis, subsessilibus, maturis valde elongatis, indeque pedicellatis, clavatis v. oblongo-ellipsoideis, parte sporif. 35-60 \times 8,5-10; sporidiis octonis, distichis v. inferne monostichis, oblongo-ellipsoideis, utrinque rotundatis, nonnullis subinæquilateralibus, ad septum non constrictis, maturis distincte longitrorsum striatulis, 12-14 \times 5, singulatim hyalinis, gregatim brunneo-translucidis.

Hab. ad ramum corticatum in insula St. Thomas Indiæ occ. (RAUNKIAER). — Status conidiophorus *Dendrodochii* sp. sistit.

43. *Nectria subbotryosa* v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 4914
 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 20.
 Peritheciis numerosis in stromate obscure flavo gregarie insidentibus, greges 1-3 mm. long., flavo-citrinis, globosis 300-360 μ . diam., extus farinoso-squamulosis, squamulis late adnatis plerumque obtusis 65 \times 50; paraphysibus filiformibus, numerosis; ascis clavatis, sessilibus, octosporis, 48-55 \times 7; sporidiis submonostichis v. distichis, hyalinis, ellipsoideo-elongatis, utrinque attenuatis, obtusis, ad septum non constrictis, 12-15 \times 4-5.

Hab. in cortice arboris emortuæ cujusdam, Jaraguaberg Sao Paulo Brasilia. — *Nectr. botryosæ* P. Henn. affinis sed differt peritheciis sporidiisque majoribus.

44. *Nectria luteo-coccinea* v. Höhnelt, *Sitzb. k. Ak. d. Wiss. Wien* 4915
 CXVIII, Abt. I (1909) p. 299. — Peritheciis subgregariis v. sparsis vegetis diaphanis partim flavis partim læte rubris, globosis 2-300 μ . diam., squamulis 100 \times 80 rubentibus v. sæpius flavis v. versicoloribus conspersis, ostiolo 44 μ . diam., papilla ex cellulis minutis concentricis formata; perithecii et squamularum contextu ex cellulis globoso-polygoniis 20 μ . diam. composito; paraphysibus paucis latiusculis; ascis clavatis sessilibus, 76-88 \times 9-12, raro tetrasporis; sporidiis monostichis v. subdistichis ellipsoideis utrinque obtusis hyalinis plerumque quadriguttulatis obsolete uniseptatis, 10-13 \times 5-5,5.

Hab. in ligno putrescenti in Horto bot. Buitenzorg ins. Java.

45. *Nectria Manihotis* Rick in Theiss. *Ann. Mycol.* (1910) pag. 459, 4916
 cum ic. — Acervulis stromaticis erumpentibus, mox superficialibus, 1,5-2,5 mm. latis, 0,8-1,4 mm. cr., griseo-albidis; peritheciis stromati insidentibus, flavidulis, dense aggregatis, globoso-ellipsoideis, extus floccoso-squamulosis, 250-340 μ . diam., ipsa cavitate peritheciali c. 170-240 μ . diam. v. 220-240 \times 160, poro pertuso; ascis cylindræis, breviter pedicellatis, supra rotundatis parte sp. 54-58 \times 6,5-7,5; sporidiis ellipsoideis, hyalinis, oblique monostichis v. distichis, 4-guttulatis, septo medio delicatissimo, non constrictis, 10-13 \times 5, utrinque angustatis.

Hab. in ramis emortuis *Manihotis* in Brasilia.

IV. *Hyphonectria* Sacc.

46. *Nectria byssotecta* Rehm, *Ann. Mycol.* VII (1909) p. 539. — 4917
 Peritheciis in maculis pseudostromaticis orbicularibus, convexulis,

3-8 mm. diam. arctissime congregatis, hyphis hyalinis, septatis, fragilibus, 4-5 μ . cr., coarctatis et obtectis, globulosis, succineis, poro vix conspicuo pertusis, 0,15 mm. diam., flavidulo-parenchymatice contextis, siccis urceolatis; ascis clavatis, tenerrimis, 65-70 \times 8-9, 8-sporis; sporidiis medio septatis, haud constrictis, utraque cellula guttas oleosas 2 magnas includente, demum ?3-septatis, hyalinis 10-12 \times 4-5, distichis; paraphysibus?

Hab. in cortice *Anacardii*, Parà Brasilæ (C. F. BAKER). — Occurrit una cum *N. Anacardii* P. Henn.

47. *Nectria zonata* Seaver, *Mycologia* II (1910) p. 180, f. 1, t. XXX, 4918 fig. 1-5. — Peritheciis mycelio radiatim effuso insertis in zonas concentricas dispositis et spatium vacuum centrale relinquentibus; conidiophoris ex mycelio oriundis, verticillato-ramosis, ramulis ultimis deorsum incrassatis; conidiis catenulatis fusoideis 10-12 \times 5 intus granulosis et sæpe superficie minutissime asperulis; peritheciis copiosis pallide aurantiis v. carneis senio obscurioribus, interdum filamentis mycelii conspersis et tunc albidis; ostiolo promiculo rarius in sicco collabescente; ascis clavatis, octosporis; sporidiis distichis v. varie congestis, late fusoideis inæquilateris, uni-septatis leviter constrictis, loculo inferiore paullo angustiore, intus minute guttulatis, hyalinis 17-18 \times 8-9.

Hab. in calidiariis Horti botanici New York ad ollarum superficiem, Amer. bor.

48. *Nectria æmulans* Rehm, *Ann. Mycol.* VII (1909) pag. 539. — 4919 Peritheciis in mycelio tenuissimo hypharum mox evanido sessilibus, plerumque arcte congregatis, primitus globosis, mox cupuliformibus, dilute flavo-albidulis, papillula minima subfusca, 0,2-0,25 mm., parenchymatice hyalino-contextis, hyphis hyalinis, subramosis, curvatis, obtusis, septatis, c. 50 \times 4 obtectis; ascis cylindraceis 90 \times 10, octosporis; sporidiis fusiformibus, utrinque subobtusatis, rectis, medio septatis, haud constrictis, hyalinis, 14-15 \times 4-4,5, monostichis; paraphysibus nullis.

Hab. ad stipitem Filicis, São Leopoldo Rio Grande do Sul Brasilæ (RICK S. J.) — *Nectria suffulta* B. et C. affinis sed diversa. Habitus *Hypomycetis* sp.

49. *Nectria hæmatites* Syd., *Deutsche Zentral-Afrika Exped.* (1907- 4920 1908) II Bd. pag. 98. — Peritheciis sparsis v. sæpius gregariis, sine stromate, hemisphæricis, c. 300-500 μ . diam. levibus, sanguineis, poro minutissimo, in sicco valde collapsis et applanatis, basi hyphis amœne radiantibus usque ad 250 μ . longis et 3,5 μ . crassis in

siccò flavidis circumdatis; ascis clavatis, aparaphysatis, brevissime stipitatis, 70-110 \times 10-14, octosporis; sporidiis mono-distichis, anguste ellipsoideis v. fusiformibus, medio 1-septatis, non constrictis, hyalinis, 21-28 \times 7-9.

Hab. parasitice supra Algam pleurococcaceam ad cortices, Ka-rissimbi Africæ trop.

50. *Nectria sphagnicola* Kirschst., Verh. Bot. Ver. Brandenburg 4921 XLVII (1906) p. 59. — Peritheciis plerumque solitariis et stratu albido hypharum radiantibus insidentibus, aurantiacis, globosis, demum profunde discoideo-collabescentibus; ascis cylindraceis, supra rotundatis, breviter pedicellatis, octosporis, 50-70 \times 6-7; sporidiis monostichis, supra quandoque irregulariter dispositis, ellipsoideis, bilocularibus, non constrictis, leniter viridi-flavo tinctis, 8-11 \times 6-7; paraphysibus filiformibus; excipulo sub microscopio flavido; hyphis basi tæniæformibus et subspiraliter contortis, 3 μ . latis.

Hab. in Sphagnis in calidario Horti bot. berolinensis (P. MAGNUS).

51. *Nectria ? versicolor* (Fr. Brig.) Sacc. et Trott., *Sphaeria versicolor* 4922 Fr. Briganti in Annali dell' Accad. degli aspiranti naturalisti Napoli III ser., 1 vol. (1861) p. 25, tab. I, fig. 1-4. — Peritheciis minutissimis confertis v. gregariis, subglobosis, papillatis, primo amœne virentibus, postea flavis, tandem aureis, subiculo effuso candido insidentibus; ascis et sporidiis non descriptis.

Hab. ad corticem vetustum Ficus Caricæ, Neapoli (O. G. COSTA). — Subiculum e tomento byssaceo contextum subglabratum, superficiale, confluens, sed in individuis solitariis circinatum; perithecia distincta, vix sub oculos cadentia; juniora mollia, adulta duriuscula, papillis (potius tuberculis) ope lentis vitreæ inæqualibus conspersa; sursum collabescendo umbilicata, concava; ostiolum prima ætate obsoletum, serius magnum et sæpius margine crenato v. angulato dehiscens (Brig. l. c.). — Stirps nectriacea videtur, sed, ignota fructificatione, omnino dubia.

V. *Lasionectria* Sacc.

52. *Nectria Elasticæ* Koord., Botan. Untersuch. (1907) p. 174, f. 12. 4923 — Peritheciis gregariis v. solitariis, superficialibus, e globoso depressis, vertice demum leviter umbilicatis, 140-190 μ . diam., stramineis v. pallide aurantiis, undique brevissime sed distincte albidopilosulis, pilis 12-17 μ . longis continuis v. 1-septatis, curvatis, ob-

tusis, indivisis, contextu laxiuscule cellulari, sordide stramineo, vix hyalino; ascis cylindraceo-clavatis $35-42 \times 5$, deorsum attenuatis, apice (haud incrassatis) obtusatis, 6-8-sporis, paraphysibus filiformibus paucis evanescentibusque intermixtis; sporidiis oblique monostichis vel distichis, oblongis, medio haud constrictis, curvulis $10-13 \times 2,5$ plerumque $12-13 \times 2,5$, hyalinis medio 1-septatis, utrinque obtusis v. subtruncatis.

Hab. in foliis putrescentibus plantulæ Fici elasticæ cultæ in Horto bot. Berlin-Dahlem ex Java introducta cum conidiis *Colletotrichi Elasticæ* Zimm. quod forsân status conidicus.

53. *Nectria flavo-ciliata* Seaver, Mycologia I (1909) pag. 54, tab. V 4924 fig. 11, *Nectria bicolor* Ellis et Ev. Proc. Acad. Nat. Sc. Phil. (1893) p. 443, nec *Nectria bicolor* Berk. et Br. — Syll. II, p. 487. — Peritheciis dense gregariis majusculis, 250-300 μ . diam., subglobosis, ostiolo papillato præditis, exclusa areola ostiolari, pilis obtusis, septatis, clavatis, hyalinis sursum vero aureo-sulphureis; ascis clavatis $35-40 \times 7-8$, octosporis; sporidiis distichis, fusoideis, 1-septatis, hyalinis, $8-12 \times 2,5-3$.

Hab. in ramis emortuis Caryæ, Delaware Amer. bor.

54. *Nectria lactea* Ell. et Morg. ap. Ellis et Everhart, North Amer. 4925 Pyr. p.110, Seaver in Mycologia, I (1909) p. 54, t. V, f. 5. — Peritheciis minutis 125-200 μ . diam., subglobosis gregariis v. confertis, flavidis, primo pilis densis delicatis, albis præter ostiolum tectis, indeque colorem lacteum fingentibus, demum ætate flavicantibus; pilis 2 μ . cr., extus minute granulosi, interdum vero levibus; ascis cylindraceis, octosporis, $40-50 \times 5$; sporidiis monostichis, late ellipsoideis, hyalinis, 1-septatis, $5-8 \times 3-5$, quaque cellula 1-guttata.

Hab. in fungis vetustis Polyporis, Stereis et etiam in ligno putri, New York, Ohio, Florida, Luisiana, Amer. bor.

55. *Nectria Mercurialis* Boud. — Syll. IX, pag. 969 — var. *Urticæ* 4926 Rehm, Oesterr. Bot. Ztschr. (1904) p. 87. — Ascis clavatis $50-60 \times 7-8$; sporidiis obtuse fusoideis v. oblongis, utrinque rotundatis, medio septatis, haud constrictis, utraque cellula guttas oleosas magnas 2 includente, $12-17 \times 4-5$.

Hab. ad caules siccos *Urticæ* dioicæ prope Neufriedenheim Bavarie.

56. *Nectria Kickxiæ* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 125. 4927 — Peritheciis subæspitosis, subglobosis v. ovoideis, coccineis, aureo-papillatis, flavido-furfuraceis, 150-180 μ . diam., pilis flexuosis

v. apice incrassatis, septatis, flavidis, c. 30-80 \times 6-10 vestitis; ascis fusoides octosporis, 45-60 \times 5-7; sporidiis subdistichis v. oblique monostichis, fusoides, hyalinis, medio 1-septatis haud constrictis, 7-12 \times 2,5-3.

Hab. in ramis emortuis *Kickxiæ elasticæ*, Victoria Kameron Africa centralis. — Quoad statum conidicum cfr. *Leptotrichum Kickxiæ*.

57. *Nectria Cannæ* (Speg.) Sacc. et Trott., *Lasionectria Cannæ* Speg., 4928 An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 406. — Maculis nullis sed matrice tota nucida; peritheciis superficialibus, subgloboseis, 500-750 μ . diam. siccis irregulariter corrugatis, ostiolo destitutis, melleis, vix puberulis, pilis simplicibus 30-50 \times 3-4 adpersis; ascis cylindraceo-subfusoides breviter attenuato-pedicellatis 70-80 \times 10-12, aparaphysatis, octosporis; sporidiis ellipsoideo-subcylindraceis utrinque obtusis non septatis, 14-16 \times 5, loculis æqualibus grosse pluri-guttulatis hyalinis.

Hab. ad culmos *Cannæ glaucae* in horto Santa Catalina pr. Buenos Aires, Argentina, America austr. — *Nectria Musæ* Pat. affinis, sporidiis tamen non ovoideis recedens.

58. *Nectria placenta* von Höhnelt, *Ergeb. Bot. Exp. Südbraz.* 1901, 4929 *Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII* (1907) Extr. p. 19. — Peritheciis sparsis, flavo-citrinis, 620 μ . diam., 250 μ . circ. altis, lenticulari-discoideis, centro profunde umbilicatis, circum circa hyphis paucis v. numerosis patentibus in flocculos 120 \times 12-30 congestis vestitis; paraphysibus numerosis, mucosis; ascis clavatis, octosporis, 60-65 \times 8-10; sporidiis subhyalino-pallescentibus, monovel subdistichis, non constrictis, crassiuscule tunicatis, ellipsoideis utrinque rotundatis, 12-30 \times 5-6.

Hab. ad corticem arboris ejusdam, Jaraguaberg Sao Paulo Brasilia.

59. *Nectria pilosella* Rehm, *Oesterr. Bot. Ztschr.* 1904 p. 87. — 4980 Peritheciis sparsis, sessilibus, globulosis, subumbilicatis, haud papillulatis, albo-succineis, poro obscuriore, vix conspicuo pertusis, 210-240 μ . diam., pilis crebris, rectis, simplicibus, ad basim dilatam 5 μ . cr., versus apicem plus minusve subacutatis, septatis, hyalinis, 40-60 μ . long., obsessis, parenchymatice contextis; ascis clavatis, octosporis, 50-60 \times 7-8; sporidiis fusoides v. subclavatis, rectis, medio septatis, haud constrictis, utraque cellula guttam oleosam 1-2 includente, hyalinis, plerumque oblique monostichis, 12-14 \times 3; paraphysibus tenerrimis, septatis, 2-3 μ . cr.

Hab. ad culmum Graminis in valle Kienbach prope Andechs Bavariæ sup. — *Calonectria ochroleuca* (Kze. et Fr.) Sacc. affinis.

60. *Nectria Henningsii* Rehm, Hedw. XXVIII (1889) p. 352. — Pa- 4981
 ritheciis sparsis vel gregariis, sessilibus, semiglobosis, siccis plerumque patellariformiter collapsis, poro vix conspicuo pertusis, ceraceis, aurantiacis, contextu parenchymatico, basi hyphis hyalinis obsessis, 400-800 μ . diam; ascis clavatis, teneris, 50-80 \times 8-10, octosporis; sporidiis oblongis, apice rotundatis, rectis, bilocularibus, utraque cellula guttula oleosa magna instructis, hyalinis, distichis, 9-12 \times 4-4,5; paraphysibus parvis, ramosis, J.-

Hab. ad vaginas foliorum putridorum Musæ in palmario horti bot. regii Berolinensis (HENNING). — Ab affinibus *N. importata* Rehm, *vagabunda* Speg., *foliicola* B. et C., satis diversa.

61. *Nectria setosa* Ferd. et Winge, Botanisk Tidsskrift XXIX (1908) 4982
 pag. 11, tab. I fig. 4. — Peritheciis superficialibus, discretis vel perpaucis gregariis, initio globosis, dein applanatis siccisque pezizoideo-collapsis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam, colore carneo vel aurantiaco, setis sparsis, concoloribus, rigidis, coremiiformibus, inferne crassis, sursum leniter attenuatis varieque fimbriato-divisis (conidiophoris?), usque ad 100 μ . long., præsertim parte inferiori, obsessis; ascis juvenilibus lanceolato-subfusoides, maturis cylindræco-clavatis, 50-70 (parte spor.) \times 8-10,5, in pedicellum tenuem, mox secedentem, usque ad 20 μ . longum leniter attenuatis; sporidiis octonis, superne subdistichis, inferne plerumque monostichis, oblongo-ellipsoideis, utrinque rotundatis, ad septum non vel vix constrictis, 12-14,5 \times 5-6, hyalinis.

Hab. ad vaginas siccas Musæ (?) spec. in insula St. Thomas Indiæ occ. (RAUNKJÆR).

62. *Nectria coccophila* Nomura, Nôji Shikenio Hokoku (1901) p. 105 4983
 (japonice).

Hab. in Aspidioto pernicioso, in quo scarlet disease efficit in Japonia. — An diversa ab aliis *Nectriae* speciebus coccogenis?

63. *Nectria Anacardii* P. Henn. in Rehm, Ascom. Exsicc. fasc. 42, 4984
 1908, n. 1781; Ann. Mycol. VI (1908) pag. 486. — (Nomen nudum).

Hab. in cortice Anacardii occidentalis, Pará Brasilis (BAKER).

64. *Nectria fuscidula* Rehm — var. *Menthæ* Rehm, in Strasser Verh. 4985
 zool. bot. Ges. Wien LVII (1907) p. 308. — (Nomen nudum).

Hab. in caulibus putrescentibus *Menthæ silvestris* Sonntagberg Austriæ inf.

65. *Nectria flammeola* Weese in Jaap, Verh. bot. Ver. Prov. Bran- 4936
denb. LII (1910) p. 134. — (Nomen nudum).

Hab. in cortice vetusto *Populi canadensis* prope Triglitz Germania.

66. *Nectria incrustans* Weese, in Jaap Verh. bot. Ver. Prov. Bran- 4937
denb. LII (1910) p. 134. — (Nomen nudum).

Hab. in ramulis putrescentibus *Alni glutinosæ* pr. Triglitz in Germania.

67. *Nectria consors* (Ell. et Ev.) Seaver, Mycologia I (1909) p. 61. 4938
— Ita vocanda est *Dialonectria consors* Ellis et Ev., *Nectriella consors*, Sacc. Syll. IX, p. 941, nam sporidia, teste Seaver, sunt distincte septata.

CRYPHONECTRIA Sacc. — Syll. II p. 501, XIV p. 639, XVII p. 783.

1. *Cryphonectria Acaciarum* Spegazz., An. Mus. Nac. Buenos Aires 4939
t. XIX (1909) p. 409. — Matrice immutata; stromatibus subglo-
bosis v. confluyendo difformibus sparsis v. laxe gregariis, erumpenti-
superficialibus intus aurantiacis extus vix granulosis coccineis vel
fusco-coccineis; peritheciis immersis globosis 100-120, flavidulis;
ascis subfusoides aparaphysatis, brevissime pedicellatis, 70-85 ×
10-12, octosporis; sporidiis subellipsoideis 18-22 × 6-8, ad septum
non constrictis, levibus, hyalinis, grosse 1-guttulatis.

Hab. ad ramos *Acaciæ tucumanensis*, *A. ripariæ*, *A. bonariensis*, in dumetis Jujuy, Salta, Tucumán, Chaco, Misio-
nes, Argentina Amer. austr.

NEOHENNINGSIA Koord., Botan. Untersuch. (1907) pag. 164 (Etym.
neos novus et *Henningsia*). — Perithecia superficialia, mycelio
stramineo insidentia, subglobosa, submembranacea, subhyalino-
straminea; glabra, stromate destituta, apice poro minutissimo per-
forata, appendiculis cellulosis planis trigonis hyalino-stramineis te-
nuibus vestita; contextu celluloso tenui. Asci haud fasciculati, cy-
lindranei, aparaphysati, 3-8-spori, plerumque 6-8-spori. Sporidia
cylindracea, recta v. leviter curvata, hyalina, medio 1-septata. —
Genus nectriaceum, nec eurotiaceum, sed ob appendiculas trigonas
perithecii servari meretur. Aliæ species *Nectriæ* huc transferri
debent.

1. *Neohenningsia stellulata* Koord., l. c. p. 164, fig. 8. — Peritheciis 4940

sessilibus, 200-250 latis, 90-100 μ . altis, epiphyllis, basi appendicibus stellulatis 80-120 μ . longis, cellulosis, acutis vel acutissimis; ascis 42-44 \times 5-7; sporidiis fuscoideis, utrinque rotundatis v. truncatis, 1-septatis, non constrictis, 12-14 \times 2,75-3.

Hab. in foliis putrescentibus Fici elasticæ, Purworedjo prov. Kedu, Java, majo 1906 (KOORDERS).

2. *Neohenningia brasiliensis* P. Henn. in Rehm, Ascom. exs. fasc. 41, 4941 n. 1761, Ann. Mycol. VI (1908) p. 119. — Peritheciis gregariis superficialibus, sessilibus, subglobosis, in sicco subcorneis, rufo-brunneis, madore tenui-membranaceis, parenchymaticis, flavidulis apice poro minuto perforatis, 140-200 μ . diam., appendicibus stellulatis (8-10) radiato-cellulosis, trigonis, obtusis, 60-80 \times 8-14 vestitis; mycelio ex hyphis flavo-fuscidulis, ramosis, septatis, 2-3,5 cr.; ascis cylindraceo-clavatis v. fuscoideis, octosporis, 30-44 \times 5-7; sporidiis oblique monostichis v. subdistichis, cylindraceis, utrinque rotundatis, curvulis, sæpe 3-4-guttulatis, continuis (?), hyalinis, 8-15 \times 2,5-3.

Hab. in foliis *Monsterae* sp. in horto bot. Goeldiano, Pará Brasilæ (C. F. BAKER).

SPHÆROSTILBE Tul. — Syll. II p. 511, IV p. 972, XI p. 359, XVII p. 798.

1. *Sphærostilbe flavida* Massee, Bull. Miscell. Bot. Gard. Kew (1909) 4942 p. 340, cum icon. et *Diseas. cultiv. Plants and Trees* (1910) p. 190, cum ic. — Peritheciis ovatis, in cæspitulos suborbiculares dense congestis, late rubris, verruculosis, ostiolo prominulo papillato ornatis; ascis cylindraceis, sursum abrupte truncatis, 8-sporis; sporidiis hyalinis, ellipsoideis, utrinque acutatis uniseptatis, 15 \times 6-7.

Hab. in foliis vivis *Coffeæ*, quæ valde vexat et necat, morbum dictum «mancha» v. «viruela» efficiens in America centrali et Brasilia. — Status conidicus sistit *Stilbum flavidum* Cooke — Syll. IV, p. 573.

2. *Sphærostilbe Cordiæ* Rehm, Ascom. Exsicc. fasc. 42 (1908) n. 1782; 4943 Ann. Mycol. VI (1908), pag. 486. — Peritheciis in mycelio epiphylo orbiculari, arachnoideo, plus minusve conspicuo, albidulo 2-6 arcte congregatis, sessilibus, globulosis, poro vix conspicuo pertusis, glabris, carneo-roseis, siccis umbilicato-collapsis, 0,2-0,25 mm. lat., ad basim hyphis brevibus, septatis, hyalinis, sparsis, 5-8 μ . lat. obsessis, parenchymatice flavo-contextis, plerumque in consortio *Stilbi* fungi conidiophori, erecti, cylindracei v. obovato-cla-

vati, obtusi, sæpe subfasciculati, albiduli, hirtelli, ad clavulam carneo-roseam ovatam 0,15-0,2 mm. lat., 1,2 mm. alti; ascis cylindraceis tenerrimis, sessilibus circ. 60 × 8, octosporis; sporidiis oblongis, utrinque obtusis, medio septatis et valde constrictis, utraque cellula guttulis oleosis repleta, glabris, hyalinis, 10-12 × 5-6, mono- interdum distichis; paraphysibus nullis; conidiis *Stilbi* singulis in basidiis hyalinis 2,5 μ . lat., sessilibus, fusoides, utrinque acutis, rectis, unilocularibus, biguttatis, hyalinis, 9-10 × 3.

Hab. ad folia Cordiæ umbraculiferæ, Parà Brasiliæ (C. F. BAKER). — Status conidicus *Stilbum Cordiæ* (Rehm) Sacc. et Trott. dicendus.

3. *Sphærostilbe Eichelbaumiana* P. Henn., Engl. Jahrb. VXXVIII 4944 (1905) p. 112. — Cæspitulis pulvinatis, c. 1-1,5 mm. diam.; peritheciis aggregatis, subconfluentibus ovoideis, papillatis, pruinosis albidis, c. 200 μ . diam.; ascis cylindraceis, obtusis, octosporis, 60-70 × 5-5,5; sporidiis oblique monostichis vel subdistichis, ellipsoideis, obtusis, 8-10 × 4-5, hyalinis, granulato-verrucosis, medio 1-septatis; stromatibus conidiophoris intermixtis, filiformi-clavatis, c. 350-450 × 100, capitulis hemisphaericis ceraceis, albidis, hyphis 2-2,5 μ . cr.; conidiis ellipsoideis vel subfusoides, hyalinis, 4-5 × 2-2,5.

Hab. in ramis corticatis, Amani Ost-Usambara Africae centr. (EICHELBAUM). — Status conidicus *Stilbum Eichelbaumianum* (P. Henn.) Sacc. et Trott. vocandus.

4. *Sphærostilbe intermedia* Ferd. et Winge, Botan. Tidsskrift XXIX 4945 (1908) p. 12. — Stromate substrato adnato v. margine libero, pedes conidiophorum cingente iisque connato, convexo v. subplano, hypocreoide, 2-6 mm. diam., in sicco pallide carneo v. luteo-albo, ostiolis peritheciolorum aurantiaco-papillato, humefacto subcinnabarinis; peritheciis stromate immersis, ostiolis obtuso-conicis erumpentibus, ovoideo-subglobosis, 170-200 μ . diam., ascis lineari-cylindraceis, apice rotundatis, 70-85 × 5,5-7,5, subsessilibus; sporidiis octonis, monostichis, ellipsoideis, utrinque rotundatis, nonnumquam levissime inaequalateralibus, episporio subtiliter granuloso, 1-septatis, ad septum non v. vix constrictis, 10,5-12,5 × 4,5-5,5, flavidulis; conidiophoris stromati concoloribus, ad typum *Stilbi* formati, pedicello usque 1 mm. longo; capitulo subgloboso 400-600 μ . diam.; conidiis ellipsoideis, 4-8 × 2, hyalinis.

Hab. ad corticem arborum in insula St. Thomas Indiæ occ. (RAUNKIAER). — Inter *Sph. hypocreoidem* K. et C. et *Sph. Hen-*

ningsii F. et W. media. Status conidicus **Stilbum intermedium** (F. et W.) Sacc. et Trott. nuncupandus.

5. **Sphaerostilbe ochracea** Syd., in De Wildem. Flore Bas- et Moy.- 4946
Congo t. III, fasc. I (1909) Extr. p. 15. — Peritheciis plerumque
cæspitosis, 3-15 dense aggregatis, subglobosis, 200-275 μ . diam.,
dein centro collabescentibus, minutissime papillulatis, leniter ru-
gulosi, ochracei; ascis cylindraceis, obtusis, 55-70 \times 4-5,5, octo-
sporis; sporidiis monostichis, ellipsoideis, subinde oblongis, utrinque
rotundatis v. leniter attenuatis, medio septatis, non constrictis,
hyalinis, 10-16 \times 3,5-4,5; fasciculis conidiophoris filiformibus, ri-
gidis 1200 μ . long., 100-130 μ . cr., apice usque ad 300 μ . cr., gri-
seis; conidiis ellipsoideo-oblongis, hyalinis 3-5 \times 2.

Hab. in corticibus, Kisantu Congo Afr. trop. (VANDERYST).

6. **Sphaerostilbe Henningsii** Ferdin. et Winge, Botanisk Tidsskrift 4947
XIX (1908) pag. 12. — Ita nuncupanda *Sph. hypocreoides* P.
Henn. 1902 — Syll. XVII, p. 798 — nec Kalchbrenner et Cooke
1880 — Syll. II, p. 515. — Status conidicus **Stilbum Vanderysti**
Sacc. et Trott. dicendus.

HYPOCREA Fr. — Syll. II p. 520, IX p. 972, XI p. 361, XIV
p. 641, XVI p. 583, XVII p. 800.

1. **Hypocrea argentinensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4948
(1909) p. 409. — Stromatibus majusculis pezizoideis primo cupu-
latis dein convexo-expansis, sordide flavescentibus intus albis; pe-
ritheciis non prominulis, globosis 90-120 μ . diam., obsoletissime
papillato-ostiolatis; ascis cylindraceis, basi breviter attenuato-pedi-
cellatis, 80-100 \times 5, octosporis, aparaphysatis; sporidiis primo eli-
psoideis 10-11 \times 5, tunica externa cito diffuente ac loculos e glo-
bosos subovatos 4-5 \times 4, hyalinos grosse uniguttulatos liberante
donatis.

Hab. ad ramos dejectos putrescentes Patagoniæ ameri-
canæ in silvis secus Rio San Francisco, Jujuy, Rep. Argentina
Amer. austr.

2. **Hypocrea bambusella** v. Höhnelt, Ergeb. Bot. Exp. Südbras. 1901 4949
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 20.
Stromate depresso, indistincte limitato, sicco sæpe margine incur-
vato, rotundato v. elongato, pallide flavo-ochraceo, 1-3 mm. long.,
200-250 μ . cr., ostiolis peritheciorum brunneis, sæpe laxè v. arcte
seriatim dispositis, punctulata; contextu pallido; peritheciis globo-
sis, omnino immersis, papillato-ostiolatis, 160 \times 120; ascis nume-

rosis, cylindraceis, $60 \times 3-4$, octosporis, paraphysibus filiformibus obsitis; sporidiis monostichis, hyalinis, in 16 loculos sæpe subcuboideos v. ovoideos $2-4 \times 2-3$, secedentibus.

Hab. in culmo putri Bambusæ, ad flumen Rio Pardo in districtu S. Cruz Sao Paulo Brasilia.

3. *Hypocrea flavo-miniata* Bres. in Theiss., Ann. Mycol. (1910) p. 457. 4950

— Stromate indefinito, irregulari, 0,5-0,6 mm. v. usque ad 1 mm. crasso, obscure et sordide flavido sed nigro punctato-ostiolato, intus e minio sanguineo colorato; strato hyphali peripherico 80-100 μ . cr., obscure rubro et perithecia obtegente; peritheciis laxiusculis 280-380 μ . cr.; ascis cylindraceis $90-150 \times 5$; sporidiis $10-12,5 \times 4$, loculo superiori globoso-ellipsoideo, inferiori subcuboideo, constrictis, jam in asco secedentibus.

Hab. in ligneo corticato arborum Brasiliæ.

4. *Hypocrea turbinata* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4951

Ark. f. Bot. Bd. V (1905) p. 11, fig. 7, a-c. — Stromatibus dense gregariis, superficialibus, basi matrice insculptis, crasse discoideis vel discoideo-turbinatis, disco dilatato, mutua pressione undulatum vel polygone, rarius orbiculariter determinato, superficie inæqualiter rugoso vel plicato, obscure cerino, basim versus perpaulum flocculosis, pallide flavescentibus vel fere albidis, 0,5-2 mm. latis, sæpe usque ad 2 mm. latis, sæpe usque ad 2 mm. altis; peritheciis numerosis, stromate plane immersis, sphærioides, vertice paulum convexulis, 150-200 μ . diam.; ascis octosporis, cylindraceis, sursum truncatis, deorsum longiuscule pedicellatis, circa $100 \times 6,5$; sporidiis monostichis, bilocularibus, articulis varia forma, plerumque globoso-cuboideis, interdum fere rhombiformibus vel conico-cylindraceis, superiore sæpe ellipsoideo-cylindraceo, $5-6,3 \times 3,8-5$, inferiore sphæroideo 4-5 μ . diam., obscure olivaceis, uniguttulatis; paraphysibus nullis; textura stromatis intricata, hyphis crassis, turgidis, ramosis, flexuosis, composita; parietum peritheciolorum subparenchymatica.

Hab. ad truncos, Serra da Chapada, Buriti, Matto Grosso Brasiliæ (MALME). — Forma stromatum insignis species vix ulli adhuc descriptæ affinis.

5. *Hypocrea subsulphurea* Syd., in De Wildem., Flore Bas.-et Moy- 4952

Congo t. III, fasc. I (1909) pag. 15. — Stromatibus tenuissimis, effusis, membranaceo-adnatis, usque ad 3 cm. longis, citrino-sulphureis, margine glabris; peritheciis crebris, omnino immersis, globulosis, luteo-rufis, 120-180 μ . diam.; ascis cylindraceis, brevis-

sime stipitatis, aparaphysatis, 75-100 \times 4-5, octosporis; sporidiis didymis, articulis globoso-cuboideis, subæqualibus, 3-4,5 μ . diam., hyalinis.

Hab. ad truncos, Kisantu Congo, Afr. trop. (VANDERYST). —

Hypocr. sulphureæ proxima.

6. *Hypocrea simplicissima* Rick et Theiss., Ann. mycol. (1907) p. 457, 4958 f. 1-4. — Stromatibus simplicibus; peritheciis piriformibus, minutis, 250-340 \times 250-300, rubro-brunneis, ætate brunneo-atris, levibus, purpuraceis, siccis rugulosulis, dense gregariis vel plus minusve discretis, poris matricis immediate insidentibus, nectrioides, poro minutissimo pertusis; ascis anguste cylindraceis, breviter pedicellatis, p. sp. 58-64 \times 4, octosporis; sporidiis hypocreoides, hyalinis, 6-8 \times 3, uniseptatis, subconstrictis, cellulis ad morem *Hypocreae* inæqualibus, in asco secedentibus.

Hab. supra poros Trametis ochroflavæ, Petropolis Rio Grande do Sul Brasiliæ (J. RICK). — Pro hac specie conditur subg. *Haplocrea* Rick et Theiss., l. c. his notis: Perithecia distincta, stromate fere nullo excepta; asci cylindrici, sporidia octona bilocularia, mox secedendo 16.

7. *Hypocrea fragarioides* P. Henn., Engl. Jahrb. XXXVIII (1905) 4954 p. 112. — Stromatibus subgloboso-pulvinatis, subcocceinis, 1,5-3 mm. diam., fragariiformibus; peritheciis subliferis, hemisphæricis v. ovoideis, papillatis, c. 180 \times 150; ascis cylindraceo-filiformibus, c. 80-95 \times 2,5-5; sporidiorum cellulis 16 subcuboideis, hyalino-flavidulis, 2,5-3,5 \times 2,5-3.

Hab. in ligno putri, Amani, Usambara occ. Africae centr. (ERCHELBAUM).

8. *Hypocrea fungicola* Karst. — Syll. II, p. 528 — f. Raduli v. Höhn. 4955 in Rehm, Ann. Myc. III (1905) p. 227, Ascom. Exsicc. fasc. 34, n. 1588 (nomen nudum).

Hab. in Radulo Kmetii Bres., prope Tulln Austriae inf. (v. HÖHNEL).

9. *Hypocrea grisea* Rick, Broteria V (1906) p. 43. — Stromate globoso, gregario, depresso, 5 mm. diam., areolato, furfure griseo tecto, intus viridulo; peritheciis $\frac{1}{2}$ mm. diam., ostiolo producto, subviridulo; ascis 80-100 \times 6, membrana tenui, vix pedicellatis; sporidiis oblongis, uniserialibus, 6-10 \times 5, medio septatis, constrictis, saturate fuliginis, denique in 16 articulos separatis.

Hab. in Polyporo ? cubensi vetusto, Rio Grande do Sul Brasiliæ.

CLINTONIELLA Sacc. — Syll. II p. 532, XIV p. 645, XVI p. 588.

1. *Clintoniella incarnata* (Pat. et Har.) Sacc. et Trott., *Hypocrea in-* 4957
carinata Pat. et Har., Bull. Soc. Mycol. de France XXII (1906)
p. 120. — Stromate effuso, planiusculo, sparso v. confluenti, cras-
siusculo, 2-8 mm. lato, carnosulo, suborbiculari, albido, dein in-
carnato, ex ostioliis perithecorum, crebre punctato; peritheciis in-
natis, ovoideis, circiter 250 μ . diam.; ascis cylindraceis, brevissime
stipitatis, 75-90 \times 7-9, octosporis; sporidiis monostichis, ovalibus,
medio uniseptatis, non constrictis, minutissime punctulatis, hyali-
nis, 10-13 \times 5-6.

Hab. ad corticem ramorum, Samoa (LLOYD).

PODOCREA Sacc. — Syll. II p. 530, XIV p. 645, XVI p. 587,
XVII p. 799.

1. *Podocrea Solmsii* (Fisch.) Sacc. et Trott., *Hypocrea Solmsii* Fisch. 4958
— Syll. IX, p. 979 — var. *corniformis* Bresadola, Ann. Mycol.
V (1907) p. 241. — Stromate simplici, corniformi, 10 cm. longo,
1 cm. crasso, apice obtuso, cervino, tereti, hic illic lacunosus; ascis
100-110 \times 5-6, jodo —; paraphysibus septatis, 3 μ . crassis; articulis
sporarum cuboideis, demum subasperulis, superiori 6-6 $\frac{1}{2}$ \times 4-5 $\frac{1}{2}$,
inferiori 4 $\frac{1}{2}$ -5 \times 4 $\frac{1}{2}$ -5.

Hab. ad ligna in ins. Java (HEINRICHER). — A typo differt forma
simplici, regulari, valde elongata, exacte corniformi et sporis cu-
boideo-diffractis, non 1-septatis uti in icone Fischerii delineatur.

2. *Podocrea alutacea* (Pers.) Lind. Pflanzenfam. Pilze I, pag. 364, 4959
Hypocrea alutacea (Pers.) Ces. et De Not. — Syll. II, p. 530. —
Teste cl. Atkinson, Bot. Gaz. Dec. 1905 aliisque mycologis, species
non est parasitica in *Clavaria* et *Spathularia* sed sic dicta matrix
est genuinum ejus stroma clavariforme, hinc vera *Podocrea*.

STILBOCREA Pat. — Syll. XVI p. 588.

1. *Stilbocrea macrostoma* (B. et C.) v. Höhn. Fragm. Mykol. VIII, 4960
p. 29. — Ita vocanda est *Nectria macrostoma* B. et C. — Syll.
II, p. 506 — cujus syn. esset *Stilbocrea Dussii* Pat. — Syll. XVI,
p. 588, teste v. Höhn.

HYPOMYCES Fr. — Syll. II p. 466, IX p. 954, XI p. 356, XIV
p. 641, XVI p. 582, XVII p. 803.

1. *Hypomyces niveus* P. Henn., in Voeltzkow Reise Ostafrika III 4961
(1908) p. 28, taf. III, f. 19. — Peritheciis sparsis, subglobosis v.

subovoideis in sicco collabentibus, tenui-membranaceis, niveis, obtuse ostiolatis, basi hyphis hyalinis laxè fasciculatis 3-4 μ . cr. circumdatis, 130-150 μ .; ascis cylindræo-clavatis, obtusis, octosporis, 40-58 \times 3-3,5; sporidiis oblique monostichis, oblongo-ovoideis, uniseptatis haud constrictis, hyalinis intus granulosi, 6,5-8 \times 2,5-3,5.

Hab. ad Polyporum sp., Fénéry Madagascar. — *H. candidanti* Plow. affinis sed peritheciis, sporidiis non constrictis, matrice etc. distinctus.

2. *Hypomyces australiensis* v. Höhn. Sitzb. k. Ak. d. Wiss. Wien 4962 CXVIII, Abt. I (1909) pag. 294. — Stromate tenui membranaceo glabro, sordide aurantiaco hinc inde violaceo v. carneo-maculato ex hyphis laxis hyalinis 3-4 rarius -8 μ . cr. formato; peritheciis immersis, sparsis, globoso-applanatis aurantiis, ostiolo obtuse conico demum collabescendo discoideo, 80 \times 65 præditis, 250 μ . diam., tenui-membranaceis; paraphysibus nullis; ascis cylindricis 90 \times 5; sporidiis monostichis, octonis, fusoideis, utrinque acutis, granulosi, hyalinis v. dilute luteolis, 12-16 \times 4-5.

Hab. in subiculo fungino albo quodam, corticem levem arboris obducente; Barrow-River Australiæ (PRITZEL). — *Hypomyces chromaticus* peraffinis.

3. *Hypomyces javanicus* von Höhn. Sitzb. k. Ak. d. Wiss. Wien 4963 CXVIII, Abt. I (1909) p. 293, Rehm, Ascom. exs. fasc. 44, n. 1849. — Stromate arachnoideo non membranaceo, inconspicuo plerumque elongato 1 cm. c. longo, late flavo-aurantiaco, ex hyphis tenuibus 2-3 μ . cr. formato; peritheciis sparsis subinde duobus v. pluribus connatis, aurantiacis infra pallidioribus, ovoideis, contextu tenui celluloso, apice in ostiolum, 50-80 \times 60, obtuse conicum desinentibus, 260 \times 200; ascis cylindricis 100 \times 6-7 paraphysibus obsoletis; sporidiis octonis monostichis fusoideis utrinque acutis, flavidis, granulosi plerumque rectis, 15-18 \times 5,5-6,5.

Hab. in hymenio Polystichi elongati in silvis Tijbodas ins. Javæ. — Cum *Hypom. chromaticus* et *boleticola* imperfecte notis forte identicus.

4. *Hypomyces Leotiarum* Fayod in Ann. Sc. nat. sér. VII, 2 (1885) 4964 pag. 49, t. III, f. 9-12. — Peritheciis hucusque ignotis; mycelii hyphis perangustis, sæpe bifurcatis, crebro septatis; conidiis in apice ramulorum nascentibus fusoideis, rectis, utrinque acutis, 9-12 \times 2,5-3, subhyalinis, intus granulosi; chlamydosporis breviter pedicellatis, initio subpiriformibus dein globosis, bitunicatis, tunica interna crassissima, atro-viridibus, 18-20 μ . diam., levibus; *Syll. fung.* XXII (X-1912)

pedicello (seu articulo inferiore) in sporam sensim dilatato, eaque brevior, tenuiter 1-tunicato, hyalino.

Hab. in toto ascomate *Leotia lubrica*, quæ non deformatur sed colorem omnino peculiarem viridem ex parasita induit, in alpidibus Vallesiacis et verisimiliter alibi. — *Leotia atro-virens* Pers., observante cl. Fayod, est probabiliter *Leotia lubrica* mycete invasa.

5. **Hypomyces Psiloti** Bernátsky in Termész. Füzet. XXII (1899) 4965

Species quoad genus omnino incerta. p. 107, t. 6-7. — Peritheciis globosis, sursum obtuse conoideis, flavo-brunneis; contextus cellularis minutis, 6 μ . cr., non prominentibus; ascis clavatis (non linearibus) octosporis; sporidiis in parte asci latiore sitis, fusiformibus, 8-12 \times 3, tenuiter tunicatis, levibus, contentu hyalino.

Hab. in truncis *Psiloti triquetri* culti in Russia. — Teste cl. Bernátsky *Nectria Vandæ* Wahrl. — Syll. IX, p. 968 — et *N. Goroshankiana* Wahrl. sint dicendæ *Hypomyces Vandæ* et *H. Goroshankianus* Bern. l. c.

6. **Hypomyces Trichoderma** (Hoffm.) Sacc. — var. **Schorsteini** Bres., 4966

Fungi gall., Ann. Myc. v. VI (1908) p. 47 — Syll. II, p. 475, XI, pag. 357. — Subiculo corticioideo, luride cinereo, ex hyphis septatis, 4-9 μ . crassis composito; peritheciis subglobosis basi tantum in subiculo nidulantibus, flavidis, nigricantibus, contextu subparenchymatico, 270-300 μ . altis, 240-250 μ . crassis, ostiolo majusculo, a perithelio basi contracta clare distincto, 100-120 μ . alto, 90-105 μ . lato, pulchre violaceo, contextu e cellularis transverse oblongis conflato; ascis cylindraceo-subclavatis 90-95 \times 5-6; sporidiis hyalinis, fusoideis, 1-septatis, utrinque appendiculatis, 22-24 \times 4.

Hab. ad asseres quercinos in ducto vaporario, Florisdorf pr. Vindobonam Austriæ (Archit. J. SCHORSTEIN). — Species hæc parum est cognita et ab auctoribus de ostiolo violaceo non fit sermo, ideoque ceu varietatem fungum nostrum admisimus; forte tamen hæc nota prætervisa, quia nisi ope microscopii conspicitur (Bresadola l. c.).

7. **Hypomyces Hyacinthi** Sorauer, Handb. Pflanzenkr. 2 Aufl. II 4967

(1886) p. 100, tab. V. — Peritheciis piriformibus 300-450 μ . alt., 160-220 μ . cr., gregariis confertisque maturis rubro-sanguineis; ascis cylindraceis 60-100 μ . long., tetrasporis vel octosporis, basi angustatis irregulariter inflatis; sporidiis oblique monostichis ellipsoideis uniseptatis, 10-18 \times 4-8, medio constrictis.

Hab. in bulbis *Hyacinthi* culti in Germania. — *Hyp. Solani* affinis sed diversa sporidiis levibus nec non aliis characteribus

ejusdem formarum inferiorum quæ sunt e genere *Fusisporii* et *Sepedonii*.

LISEA Sacc. — Syll. II p. 517, XI p. 360, XIV p. 640, XVI p. 581, XVII p. 806.

1. *Lisea parasitica* Rick, Broteria V (1906) pag. 41. — Peritheciis 4968 minutis, 50 μ . diam., gregariis, viridulo-hyalinis, denique obscure violaceis, primitus bysso tenui et alba insidentibus; ascis 38-50 \times 6-7,5, octosporis; sporidiis cylindræis 6-7,5 \times 3, uniseptatis, ad vix constrictis, hyalinis, denique viridulis; paraphysibus septum nullis.

Hab. in Hypoxyle enteroleuco Speg. parasitans, quod totum commutat, Rio Grande do Sul Brasiliæ. — An *Balzania* Speg. huc pertinet?

2. *Lisea verrucosa* Starb., Ascom. Schwed. Chaco-Cordill. Exp. Ar. 4965 kiv f. Bot. Bd. V (1905) p. 9. — Peritheciis solitariis vel sæpius in acervulis longitudinalibus, seriatim erumpentibus aggregatis, primo globulosis, deinde cylindræo-conoideis et mutua pressione difformibus, interdum fere turbinatis atque manifeste rugoso-verruculosis, vix papillulatis, demum poro lato pertusis, atris, contra lucem amœne cæruleo-violaceis, vetustioribus fulgineo-violaceis, textura mollissima, hypocreacea, cellulis 6-20 μ . diam., ad basim hyphis cyaneo-fulgineis parce cinctis, 100-175 μ . diam.; ascis octosporis, cylindræis vel cylindræo-clavatis, fere sessilibus, sursum obtuse truncatulis, 75-90 \times 7,5-9; sporidiis monostichis vel superioribus distichis, ellipsoideis vel ellipsoideo-fusoideis, utrinque obtusiusculis, primo 4-guttulatis, demum (quod e germinantibus liquet) medio septatis, interdum constrictis, rarissime 3-septatis, hyalinis; paraphysibus nullis vel mox diffluentibus.

Hab. in caulibus Equiseti una cum *Nectria lophiostomaceæ* Starb. in Prov. Jujuy, Quinta pr. Laguna de la Brea, Argentina. — Ab aliis speciebus *Liseæ* peritheciis rugoso-verruculosis, a *Giberellis* sporidiis typice 1-septatis differre videtur.

VALSONECTRIA Spegazz. — Syll. II p. 519, XIV p. 645. — Quoad *Valsonectria parasitica* (Murr.) Rehm, cfr. *Endothia gyrosa*, supra.

1. *Valsonectria Boldæ* Speg., Fungi Chilenses (1910) pag. 98, cum 4970 icon. — Stromatibus cortice innatis erumpentibus parvis aureis subpulverulentis; peritheciis paucis (2-5) circumstantibus subglobosis carnosulis, fusco-luteolis, ostioliis brevibus cylindræis obscurioribus

conniventibus non v. vix exertis coronatis, 150-180 μ . diam.; ascis clavulatis aparaphysatis longiuscule attenuato-pedicellatis, 70 \approx 6, octosporis; sporidiis parvis botuliformibus utrinque minute 1-guttulatis, leniter chlorinis, 8-12 \approx 2.

Hab. in ramulis emortuis Boldoæ fragrantis prope Talcahuano Chile Amer. austr.

Sect. 5. Phæodidymæ.

LETENDRÆA Sacc. — Syll. II p. 538, XIV p. 646.

1. *Letendræa rhynchostoma* v. Höhnelt, Fragm. z. Mykol. Sitzb. k. 4971 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 108. — Peritheciis gregariis, superficialibus, levibus, circ. 400 μ . cr., rotundatis, ovoideis, rostello usque ad 200 μ . cr. apice transverse truncato, nunc brevi nunc usque ad 700 μ . longo præditi, brunneo-flavis, tenui-membranaceis, contextu flavo parenchymatico; apice rostelli obscure brunneo; paraphysibus filiformibus, numerosis ascos longitudine superantibus; ascis tenuissime tunicatis octosporis, cylindræis, 85-100 \approx 8-10; sporidiis monostichis primum cyaneis, dein nigris, elongato-fusoideis et plus minus curvis lunulatis, utrinque obtusis, minute biguttulatis, demum bilocularibus (loculis sæpe inæqualibus), 11-17 \approx 6-7.

Hab. in endocarpio putri Juglandis regiæ, Prater prope Wien Austriæ inf.

2. *Letendræa bahiensis* Spegazz., Micromycetas de los Cacaoyeros, 4972 Rev. Facult. Agronom. y Veter., t. II, La Plata (1906) nn. 4-6, pag. 307, fig. D. — Subiculo (an heterogeneo?) superficiali, arcte matrici adnato submembranaceo compactiusculo tenui, ambitu repandulo sensim attenuato-evanescente, albescenti subcinerescente, ex hyphis gracilibus, 3-4 μ . cr., crebre ramulosis septatisque dense intertextis hyalinis efformato; peritheciis subiculo plus minusve infossis, rarius plane superficialibus, sparsis depresso-globulosis, parvis, 120-180 μ . diam., glabris, astomis (?), primo albidis dein flavidulis postremo lateritiis, membranaceis carnosulis, contextu melleo indistincto; ascis subfusoides-cylindræis antice obtuse rotundatis postice brevissime crassiusculeque pedicellatis, 70-80 \approx 12-14, aparaphysatis; sporidiis reetis v. oblique distichis, elliptico-elongatis, 20 \approx 7, rectis vel leniter inæquilateralibus, medio 1-septatis, ad septum constrictis, fuliginis, subopacis.

Hab. in trunco *Theobromæ Cacao*, Bahia de todos los Santos Brasilia (HEMPFEL).

3. *Letendræa epixylaria* Rick., in Ann. Mycol. III, p. 239 (1905). — 4973
Peritheciis gregariis depresso-orbicularibus, ostiolatis, fusco-atris, contextu nectrioideo, $\frac{2}{3}$ mm. latis, subiculo brunneo, laxo insidentibus, superne glabris, nitidis; ascis pedicellatis, linearibus, ca. 50 μ . longis (parte sporif.), 3-4 μ . latis, octosporis; sporidiis cylindraceo-rectangularibus bilocularibus, uniserialibus, loculis subinæqualibus, septo crasso formatis, 6-8 μ . longis, 3-4 μ . latis, brunneis; paraphysibus multis, filiformibus, plerumque simplicibus.

Hab. in pedunculo *Xylariæ pedunculatæ*, perithecia *Xylariæ* imitans, Rio Grande do Sul Brasiliæ.

NEOSKOFITZIA Schultz. — Syll. IX p. 981.

1. *Neoskofitzia Termitum* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 4974 CXVII (1908) Abt. I p. 998. — Peritheciis liberis, stromate destitutis, superficialibus, solitariis v. plus minus gregariis, primum sublateralibus dein sordide brunneis, globosis, 300-400 μ . diam., minute ostiolato-papillatis; contextu parenchymatico e cellulis 40 μ . lat. tenuiter tunicatis constituto; paraphysibus nullis v. indistinctis; ascis numerosis, plerumque cylindræis, 16-sporis tenuibus, 44 \approx 4; sporidiis plerumque monostichis, subovoideis, flavido-griseo-olivaceis, geminatis, 3-3,5 μ . cr.

Hab. ad nidos *Termitum*, Buitenzorg et Tjibodas in ins. Java.

2. *Neoskofitzia hypomycoïdes* Rick., in Ann. Myc. III (1905) p. 239 4975 — Peritheciis aggregatis, liberis, in mycelio mucedineo, griseo-cinereo insidentibus, globoso-ovatis, ostiolo acuto, sordide luteis, $\frac{1}{2}$ mm. latis, primitus hirsutulis, dein minutissime scabrosis; ascis linearibus, 60-70 μ . longis, 3-4 μ . latis, octosporis; sporidiis bicellularibus, mox in 16 articulos secedentibus; articulis globoso-rectangularibus, 3-5 μ . diam., hyalinis vel subhyalinis.

Hab. in *Polyporo* vetusto, Rio Grande do Sul, Brasilia.

PHÆONECTRIA Sacc. — Syll. XI p. 359, XVI p. 580, XVII p. 796 (ut subgen.), *Macbridella* Seaver, Mycol. I (1909) p. 195.

1. *Phæonectria olivacea* (Seaver) Sacc. et Trott., *Macbridella olivacea* 4976 Seaver, Mycologia II (1910) pag. 178, tab. XXX, fig. 6-13. — Stromatibus erumpentibus centro potius compactis, extus conidiophoris ramosis, numerosis, floccosis, albis dein rubentibus 1 μ . cr. conspersis, sparsis v. confluentibus; conidiophoris verticillato-ra-

mosis; conidiis catenulatis, ellipsoideis, 5-6 \times 4-5; peritheciis cæspitosis in stromate insertis v. circum positis, obscure rubentibus, granulis olivaceis conspersis et tunc cæspitulos atro-virentes redentibus; ascis cylindricis, octosporis; sporidiis monostichis, imbricatis, fusoides v. ellipsoideis, hyalinis et muco diaphano obvolutis, 1-septatis, dein olivaceis v. fumoso-brunneis, septoque constrictulis; longitudinaliter obsolete striatis, biguttulatis, 12-15 \times 8.

Hab. ad stipites Palmæ cujusdam, Montzorongo Mexico (W. A. MURRILL).

LOJKANIA Rehm, Contr. mycol. Hung. (Nöy. Kozlem. IV (1905) p. 2 (Etym. a cl. lichenologo hungarico H. LOJKA). — Perithecia membranacea, stromate superficiali ex hyphis fuscis ramosissimis, arctissime complexis formato, extus levigato, haud carbonaceo gregarie innata, fusca, papillula minima prominentia. Asci cylindracei, 8-spori. Sporidia fusiformia, medio septata, primitus hyalina, dein subfusca, 1-sticha. Paraphyses filiformes. — Stromate haud carbonaceo nec crustaceo superficiali a generibus stromaticis cum sporis phæodidymis plane diversum genus, imprimis a *Camarope* Karst., cujus stroma e substantia substrati formatum extus *Hypoxyla* similis stromate, sporis et peritheciis alienum; proximum *Neopeckia* Sacc., quæ autem peritheciis carbonaceis superficialibus, subiculo copioso interdum semiimmersis gaudet, stromate vero caret. — Quoad peritheci structure membranaceam, mollem ad *Hypocreales* propius vergit ibique forsitan sub *Hypomyceteis* aptissime locandum est (Rehm l. c.).

1. *Lojkania hungarica* Rehm, l. c. p. 2. — Peritheciis in plagis superficialibus, 1-2 cm. lat., stroma late diffusum, subæquale, 1 mm cr., extus albidulum itemque marginatum, levigatum, intus fusconigrum, molle formantibus, gregarie innatis, globosis, minute papillulatis, demum poro conspicuo pertusis, 0,4 mm. diam., contextu parenchymatico fusco, crustam obtegentem atro-inquinatam subelevantibus, haud carbonaceis, subiculo denso hypharum ramosis-simarum, longissimarum, fuscicularum, septatarum, 3-5 μ . cr. obductis et conjunctis; ascis cylindraceis, apice rotundatis, crasse tunicatis, c. 200 \times 12-15, octosporis; sporidiis fusiformibus, utrinque subacutatis, medio septatis, vix constrictis, primitus hyalinis, demum fuscis, utraque cellula guttis 2 magnis oleosis præditæ, retis, 25-30 \times 9-10, 1-stichis; paraphysibus filiformibus, 2 μ . crassis, septatis.

Hab. ad lignum in balneo sæpe inundatum, P.-Szentgyörgy, Hungariæ (Dr. ZAHLBRÜCKNER). — A *Neopectia Coulteri* et *N. diffusa* rite distincta.

Sect. 5. Hyalophragmiæ.

CESATIELLA Sacc. — Syll. II p. 557, XVII p. 808.

1. *Cesatiella polyphragmospora* Da Camara, Mycetæ aliquot Theobromæ Cacao in Sancti-Thomensi Insula, Lisboa (1910) p. 3, t. III, fig. 6-9. — Peritheciis immersis, sparsis, globosis, melleis ostiolo minuto pertusoque, 300-450 μ . diam.; ascis octosporis, cylindraceis, cylindraceo-clavulatis v. inflatis, brevi-stipitatis, apice rotundatis, 130-150 \times 15-18; paraphysibus numerosis, filiformibus, longis pluriguttulatisque; sporidiis distichis, oblongo-ellipsoideis, nubiosis, hyalinis, plerumque septem v. raro octoseptatis, plus minus falcatis, utrinque rotundatis, non constrictis, 50-60 \times 10-12.

Hab. in cortice Theobromæ Cacao in ins. S. Thomé (J. J. DE ALMEIDA et CANNAS MENDES).

CALONECTRIA De Not. — Syll. II p. 540, IX p. 982, XI p. 363, XIV p. 647, XVI p. 593, 1141, XVII p. 809.

1. *Calonectria tetraspora* (Seaver) Sacc. et Trott., *Scoleconectria tetraspora* Seaver in North Am. Fl. III, pt. 1 (1910) pag. 27. — Peritheciis in cæspitulos 0,5-2 mm. diam. dense confertis, hypostromate indistincto insertis, superficialibus, globosis v. subglobosis, ostiolo subinde collabescente præditis, extus conspicue albido-furfuraceis et tunc habitum verrucosam fingentibus, pallide aurantiacis, 250-300 μ . diam.; ascis late clavatis, 70-80 \times 10-12, tetrasporis; sporidiis monostichis v. in centro ascis subconfertis, apicibus superimpositis, ellipsoideis utrinque tenuatis, rectis curvulisve, hyalinis, intus granulosi, distincte 3-septatis, 25-28 \times 8-10.

Hab. in truncis Theobromæ Cacao, Port Maria Jamaica (EARLE).

2. *Calonectria Rehmiana* Kirschst., Verh. Bot. Ver. Brandenburg XLVIII (1906) p. 59. — Peritheciis e stromate flavido, rotundato v. elongato, immerso orientibus, primum globosis, dein discoideo-collabescentibus, membranaceis, primum pallide brunneis demum nigris; excipulo grosse parenchymatico; ascis clavatis, breviter pedicellatis, tenuissimis, octosporis, 80-90 \times 12-14; sporidiis supra

distichis infra monostichis, hyalinis, plerumque fusoides utrinque rotundatis, sed etiam subcylindræis v. subclavatis, quadrilocularibus, ad septa quandoque constrictulis, rectis v. leniter curvulis, $20-30 \approx 6-8$.

Hab. in ramulis Corni sanguineæ prope Gross-Behnitz Germaniæ.

3. *Calonectria bahiensis* Hempel, Bol. Agric. Sao Paulo, V ser. (1904) 4981 n. 1 p. 22.

Hab. in cortice Theobromæ Cacao, Bahia in Brasilia. — Exemplaria obsoleta, imperfecta observata. Crustas irregulares, laticas, atras in cortice format.

4. *Calonectria rubro-punctata* Rehm, Ann. Mycol. VII (1909) p. 539. 4982 — Peritheciis in hypophyllo singulis, maculis orbicularibus rubellis c. 0,5 mm. diam., innatis, globoso-conoideis, ferrugineis, glabris, parenchymatice tenuiter rubro-fusco contextis, papillula prominente, 0,2 mm. diam.; ascis oblongo-cylindræis, apice rotundatis, $60-65 \approx 9$, 8-sporis; sporidiis fusiformibus, utrinque acutatis, 4-cellularibus, hyalinis, $12-15 \approx 3$, distichis; paraphysibus teneris, subramosis.

Hab. in hypophyllo folii Eugeniæ bagensis, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.) — *Calonectria transeunti* similis.

5. *Calonectria pachythrix* Rehm, Ann. Mycol. V (1907) p. 531. — 4983 Peritheciis in mycelio longe lateque effuso, pallide flavo-albello, tenuissime membranaceo-parenchymatico gregarie sessilibus, globulosis, apice plerumque umbilicatis, $300-350 \mu$. diam., flavido-albellis vel flavido-succineis, contextu parenchymatico e cellulis polyedricis magnis conflato, pilis sparsis rectis, obtusis, ad basim dilatatis, 2-3 cellularibus, hyalinis, crasse tunicatis, $60-100 \approx$ ad basim $10-12 \mu$. cr., obsessis; ascis oblongis, apice rotundatis, sessilibus, c. $90 \approx 12$, octosporis; sporidiis fusideo-oblongis, utrinque subacutatis, rectis, primitus granulis minutissimis repletis, demum 4-cellularibus, hyalinis $40 \approx 4-5$, di-tristichis; paraphysibus filiformibus, $2-3 \mu$. cr., hyalinis.

Hab. ad ramulos Rubi, Sao Francisco dos Campos, Sao Paulo Brasiliæ (F. NOACK). — *Calonectria melioloidi*, *C. Lagerheimianæ* et *C. ambigua* subaffinis.

6. *Calonectria Pithecoctenii* d' Alm. et da Cam. in Rev. agron. Portug. III (1905) pag. 254, t. V, f. 1-3. — Peritheciis plerumque cœspitosis, raro sparsis, ovoideis, sursum attenuatis, atro-purpureis

400-450 \times 200-250; ascis subclaviformibus, octosporis, 65-75 \times 11-13; sporidiis amygdaliformibus, sursum rotundatis, deorsum attenuatis, triseptatis, hyalinis, oblique monostichis vel irregulariter subdistichis, 17-20 \times 8-10.

Hab. in ramulis emortuis *Pithecoctenii* Squali, in horto botanico Coimbra Lusitania (A. MOLLER).

7. *Calonectria stromaticola* P. Henn., Engl. Bot. Jahrb. XL (1907) 4985 p. 226. — Maculis epiphyllis stromatiformibus, atris, rotundatis v. effuso-angularis; peritheciis marginalibus dense cæspitosis confluentibusque, ovoideis v. subglobosis, pallidis, papillatis, in sicco collabentibus, c. 200-300 μ . cr., extus pilosis, pilis variiformibus, hyalinis, obtusis, sæpe brevibus 30-50 \times 8 v. flexuosis usque ad 250 \times 3-4; ascis clavatis, apice obtuso-rotundatis, 8-sporis, 90-15 \times 10-16; paraphysibus copiosis, filiformibus, hyalinis, c. 2 μ . cr.; sporidiis subtristichis, longe fusoides, rectis v. curvatis, utrinque obtusiusculis v. acutiusculis, primo 1- dein 5-7-septatis, constrictis, hyalinis, 50-70 \times 4-5.

Hab. in foliis *Lauraceæ* sp., Monzon 2000-2500 m. alt. in Peruvia (WEBERBAUER).

8. *Calonectria Rickiana* Sacc. et Syd., in Saccardo, Not. Mycol. IX, 4986 Ann. Myc. v. V (1907) p. 177. — Peritheciis in ascomycete epiphylo parasiticis, globulosis, 0,5 mm. diam., ceraceo-fragilibus, albidis, superficialibus, subinde squamulosis; ostiolo punctiformi impresso; ascis tereti-fusoides, brevissime stipitatis apice obtusiuscule tenuatis, ibique incrassatis lumineque angustato præditis, 140-170 \times 15, octosporis; paraphysibus filiformibus ascum subæquantibus; sporidiis distichis, fusoides v. fusideo-clavulatis, leniter curvis, 55 \times 5,5-6, rarius usque ad 75-80 \times 5,5-6, obsolete 4-5-septatis, non constrictis, hyalinis, intus minute granulosi.

Hab. in foliis *Nectandra*, parasitice in peritheciis *Ascomycetis* immaturi cujusdam, Sao Leopoldo Brasiliæ (J. RICK).

9. *Calonectria olivacea* von Höhnelt, Fragm. z. Mykol., Sitzb. d. k. 4987 Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 107. — Peritheciis semiimmersis, gregariis, liberis v. 2-3 adnatis, globosis vel ovoideo-piriformibus, 280 μ . diam., tenui-membranaceis, late ostiolato-papillatis, papilla conoidea 30-50 μ . lata; contextu parenchymatico, pallide olivaceo, circa ostiolum nigro-olivaceo et leniter cyaneo-tincto; paraphysibus numerosis, filiformibus; ascis clavatis, tenuiter tunicatis, basi breviter angustato-stipitatis, octosporis 80-100 \times 8-9; sporidiis distichis, hyalinis, elongato-ellipsoideis, utrin-

que angustatis et rotundatis, grosse quadriguttulatis, demum quadrilocularibus, ad septa non constrictis, tenuiter tunicatis, 12-16 \approx 3-4. J. —

Hab. in ligno putri Fagi prope Rekawinkel Austriæ inf. — Species a typo generis recedens.

10. *Calonectria dolichospora* Sacc. et Trott., *Calonectria macrospora* 4988

Rick, Broteria V (1906) p. 41, non Sacc. — Peritheciis majusculis, 1 mm. latis, luteo-brunneis, carneo-membranaceis, subiculo perisporiaceo insidentibus, subhirsutis, papilla minuta; ascis 180 \approx 20, clavato-cylindraceutis, curvulis, fere sessilibus; sporidiis 100-110 \approx 7, multiseptatis, multiguttulatis, uno apice angustioribus, hyalinis.

Hab. in foliis putridis Palmæ sp., Rio Grande do Sul Brasiliæ.

11. *Calonectria Copelandi* P. Henn., Hedwigia XLVII (1908) p. 253. 4989

— Peritheciis hypophyllis, sparsis v. subgregariis, sphaeroideis papillatis dein collapsis, aurantiacis, 200-250 μ .; ascis fuscoideis vel clavatis sæpe curvulis, apice acutiusculis, 8-sporis, 40-60 \approx 10-14; sporidiis oblique monostichis v. subdistichis, cylindraceuto-fuscoideis, hyalinis, 7-septatis, 20-26 \approx 4-4,5.

Hab. in foliis Orchidaceæ, Mindanao, Santa Cruz ins. Philippin. (COPELAND).

12. *Calonectria gigaspora* Massee, Kew Bull. n. 7 (1906) p. 257. — 4990

Peritheciis aggregatis, obovatis, levibus, glabris, coccineis, 1 mm. altis; ascis longissimis, octosporis, paraphysatis; sporidiis oblique monostichis v. supra distichis, hyalinis, subfuscoideis, demum tri-septatis, 90-100 \approx 20.

Hab. in culmis Sacchari officinarum, Trinidad Indiæ occ. (HART). — Facile dignoscenda forma peritheciolorum et latitudine sporidiorum.

13. *Calonectria Equiseti* Starb., Ascom. Schw. Chaco-Cordill. Exped., 4991

Archiv f. Bot. Bd. V (1905) p. 10. — Peritheciis plerumque ad nodos 3-30 aggregatis, cæspitose vel inter nodos in seriis longitudinaliter erumpentibus, rarissime nonnullis solitariis, primo globulosis, deinde turbinatis et mutua pressione difformibus, demum collabescentibus, manifeste, sed non papillatim ostiolatis, primo pallide ochraceis, deinde leniter fuscescentibus, albido-puberulis, 200-300 μ . diam.; ascis octosporis, clavatis, sessilibus, sursum lumine sæpe acutato, 44-50 \approx 6-7,5; sporidiis in superiore parte distichis vel conglobatis, in inferiore monostichis, oblongatis, utrinque obtusiusculis, guttulas 2 apicales, 2 medias foveantibus, hyalinis, 9-10 \approx 2,5-3,5; paraphysibus nullis.

Hab. in caulibus aridis Equiseti, Quinta pr. Laguna de la Brea prov. Jujuy, Argentina. — Species nulli descriptæ affinis sporidiis minoribus nec non matrice distincta videtur.

14. *Calonectria decora* (Wallr.) Sacc. — Syll. II, pag. 543. — var. 4992
parasitica Hazsl. Sphær. Hung. p. 7, t. I, f. 2. — Ascis clavatis, brevissime noduloso-stipitatis, filiformi-paraphysatis; sporidiis inæqualiter distichis fusoides, triseptatis, ad septa non constrictis, utrinque acutatis, subinde sursum incrassatis, hyalinis, 30-36 × 8-9.

Hab. parasitica in peritheciis Massariæ Populæ ad ramos Aceris Pseudoplatani pr. Eperies Hungariæ.

15. *Calonectria Fuckelii* (Sacc.) Rehm — Syll. II, p. 545. — var. 4993
Everniæ Rehm, in Tranzsch. et Serebrianikow, Mycotheca rossica fasc. II, n. 68 (1910). — Sporidiis primum 2-, dein 4-ocularibus.

Hab. in Everniæ spec. in Russia.

16. *Calonectria circumposita* Kirschst., Verh. Bot. Ver. Brandenb. 4994
 XLVIII (1906) p. 59. — Peritheciis circulariter dispositis, plerumque conjunctim erumpentibus, flavidis, piriformibus, 200-300 μ . diam.; ascis fusoides, breviter pedicellatis, supra obtusatis, octosporis, 60-70 × 10-12; sporidiis supra oblique monostichis v. irregulariter distichis, infra recte monostichis, hyalinis, oblongis vel fere fusoides sed utrinque rotundatis, medio septatis et constrictis, 4-guttulatis, demum quadrilocularibus, 14-16 × 4-5; paraphysibus indistinctis.

Hab. in charta putri prope Rathenow Germaniæ.

PARANECTRIA Sacc. — Syll. II p. 552, IX p. 987, XVII p. 812.

1. *Paranectria Wildemaniana* P. Henn., Mission E. Laurent fasc. III 4995
 (1906) p. 316. — Peritheciis in mycelio *Meliolæ* v. *Dimerosporii* parasitantibus, sparsis v. gregariis, subglobosis v. ovoideis, hyalino-subflavescentibus, membranaceo-subcellulosis, tenuibus, subtranslucentibus, 100-140 μ . diam., squamulis aleicorniformibus, apice repetito-furcatis, hyalinis, 20-30 μ . longis vestitis, basi hyphis filiformibus, hyalinis, septatis, 1,5-2 μ . cr.; ascis clavatis apice crasse tunicatis, rotundatis, 8-sporis, 37-48 × 8-11; paraphysibus filiformibus, copiosis, hyalinis, 1,5-2 μ . crassis; sporidiis subdistichis, fusoides, utrinque acutis, subrostellatis, 3-septatis, sæpe curvatis, guttulatis, hyalinis 15-20 × 5-7.

Hab. in foliis Coffeæ ad mycelium *Meliolæ* v. *Dimerosporii*, Ubangi, Congo, Africa.

2. *Paranectria imperconspicua* v. Höhn. Fragm. Mykol. VII, Sitzb. 4996

k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 822 (an potius «imperspicua»?). — Peritheciis gregaris v. subcæspitosis, globosis, flavidis, 50-100 μ . latis, superficialibus, liberis, tenui-membranaceis, ostiolo indistincto præditis, contextu peritheci 6-10 μ . cr., parenchymatico, extus pilis v. setulis hyalinis laxis tectis; ascis breviter clavatis, sessilibus vel breviter incurvo-stipitatis, supra rotundatis et æqualiter incrassatis, 36-44 \approx 16-21, 2-4 sporis v. octosporis; paraphysibus tenuiter filiformibus supra ramosis, parvis; sporidiis distichis v. tristichis, hyalinis, fusoidis, utrinque acutis, appendicibus obtusis 3-4 \approx 1 præditis, quadrilocularibus, 16-24 \approx 6-7, ad septa non constrictis, oculis mediis longioribus.

Hab. in stromatibus *Discodothis Filicum* ad truncos *Filicum* in Horto bot. Buitenzorg in ins. Java.

BROOMELLA Sacc. — Syll. VII p. 557, IX p. 988, XI p. 364.

1. *Broomella annulata* Rehm ap. Theiss., Ann. mycol. (1910) p. 461. 4997
— Ita nuncupanda est *Nectria annulata* Rehm — Syll. XVI, pag. 572 — quæ, teste Theiss. l. c., non differt a *Broomella Rickiana* Rehm in Broteria V (1906) p. 226.

GIBBERELLA Sacc. — Syll. II p. 552, IX p. 988, XI p. 363, XIV p. 649, XVI p. 599, XVII p. 813.

1. *Gibberella Saubinetii* (Montgn.) Sacc. — Syll. II, p. 554. — var. 4998
Mate Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 129.
— A typo recedit peritheciis rigidioribus sporidiisque subcrassioribus 20-22 \approx 5-6.

Hab. ad ramos dejectos putrescentes *Illicis paraguariensis* in silvis prope Campo das Cuías, Argentina Amer. austr.

2. *Gibberella rhododendricola* Rehm, Ann. Mycol. V (1907) p. 543. 4999
— Peritheciis in stromate orbiculari nigro, per peridermium erumpente, 0,5 mm. diam., 6-8 gregarie sessilibus, globulosis, minimis, atris, poro haud conspicuo pertusis, glabris, parenchymatice nigro-fusco-contextis, 0,12 mm. diam.; ascis cylindræis, 90 \approx 7-9, octosporis; sporidiis oblongis, utrinque rotundatis, 3-septatis, ad septa paullulum constrictis, hyalinis, dein dilutissime flavescentibus, 12-14 \approx 5-6, monostichis; paraphysibus ramosis.

Hab. ad ramulum *Rhododendri hirsuti* juxta viam ab Schlehdorf ad montem Herzogenstand alpium Baviaræ (Dr. REHM). — Imprimis minutie stromatis et peritheciolorum sporidiisque monostichis species distinguenda.

3. *Gibberella parasitica* Rick, Broteria V (1906) p. 41. — Peritheciis 5000 100 μ . diam., splendentibus, atris, superficialibus, coriaceo-corneis, gregariis, sed inter se separatis; ascis $45 \approx 13$; sporidiis hyalino-viridulis, octonis, uniserialibus, triseptatis, fuscoideis, $20 \approx 7$, gutturalis, paraphysibus nullis.

Hab. parasitica in Stereo quodam, Rio Grande do Sul Brasiliæ. — Vergit ad genus *Melanomma*, differt autem a *Melanommate* *Porothelio* B. et C. sporidiis multiserialibus et colore.

LOCULISTROMA Patterson, Charles et Veihmeyer in U. St. Dep. Agric. Bur. of Plant Ind. Bull. 171 (1910) pag. 11 (Ety. *stroma* et *loculi*). — Stroma erectum, cylindraceum, carnosum, molle, viride v. album, loculis etiam pycnidicis præditum. Loculi ascophori sparsi, subimmersi, ostiolati. Asci clavati, cylindracei, octospori, paraphysati; sporidia fuscoidea, 3-pluriseptata, olivacea.

1. *Loculistroma Bambusæ* Patt., Charl. et Veihmeyer l. c., tab. I. — 5001 Stroma erecto, molli, carnosum, plerumque sessili, 1 cm. circ. long., 2 mm. cr., extus obscure viridi v. nigro; peritheciis (loculis) stromate subimmersis, subsphæroideis, $125 \approx 100$; ascis octosporis, clavatis, cylindraceis, $45-50 \approx 9-10$; sporidiis olivaceis, fuscoideis, 3-septatis, distichis, $22 \approx 4,5-5$; conidiis (sporulis) primariis in loculis amplis orientibus, hyalinis, filiformibus, $14-16 \approx \frac{3}{4}-1$; sporophoris $8 \approx 0,5$; conidiis secundariis obscure olivaceis, 1-3-locularibus, hyphis olivaceis limitatis.

Hab. in inflorescentia *Bambusæ* (*Phyllostachydis*) sp. in qua cladomanias generat in America boreali.

Sect. 6. Hyalodictyæ.

PLEONECTRIA Sacc. — Syll. II p. 559, IX p. 990, XVII p. 814.

1. *Pleonectria pinicola* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5002 (1906) p. 59. — Peritheciis cæspitose erumpentibus, in stromate rubido insidentibus, globosis, breviter papillatis, rubro-lateritiis, squamulis viridi-flavis tectis; dein apice depressis, 300-400 μ . d.; ascis cylindraceo-clavatis, breviter pedicellatis, supra rotundatis, $100-120 \approx 8-12$, microsporibus numerosis faretis, $3 \approx 1$; sporidiis 4, oblique monostichis, hyalinis, varie conformatis, fuscoideis, clavatis v. cylindraceis, 7-9-transverse et loculo medio 1-longitudinaliter

septatis, 20-30 \times 4-6; paraphysibus filiformibus, multiseptatis, 3 μ . crassis.

Hab. in ramis putrescentibus Pini silvestris prope Rathenow Germaniæ.

CILIOMYCES v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV, Abt. I (1906) pag. 25 (Etym. *cilium* et *myces* ob sporidia ciliata). — A genere *Pleonectria* imprimis dignoscitur sporidiis pariter fuscoideis vel ellipsoideo-oblongis, muriformibus, hyalinis, sed utrinque 1-ciliatis.

1. *Ciliomyces oropensis* (Ces.) v. Höhn. l. c. p. 25, *Nectria oropensis* 5003 Ces. — Syll. pag. 511 et IX, pag. 967 — *Pleonectria lichenicola* (Crouan) Sacc. — Syll. II, p. 560. — Perithecia pilosula, carnea; asci 120 \times 20, octospori; paraphyses diffuentes; sporidia 26-36 \times 9-11, disticha, fusioidea, 6-septato-muriformia, non constricta, hyalina utrinque cilio 7-8 μ . longo, subulato aucta.

CALYPTRONECTRIA Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 412 (Etym. *calyptra* velum, h. e. *Nectria* obtecta). — Perithecia minuta, sparsa, molliuscula, rubescentia, epidermide tecta; asci paraphysati, octospori; sporidia muriformia, hyalina. — Est *Hyponectria* dictyospora.

1. *Calyptronectria platensis* Speg., l. c. p. 412 cum icon. — Peritheciis ex hemisphærico sublenticularibus 120-150 μ . diam., subcarnosulis, contextu obscure aurantio donatis, subiculo luteo dense ramuloso 3-4 μ . cr. septulato vestitis; ascis breviter subclavatis 60 \times 16, paraphysibus filiformibus parvis obvallatis; sporidiis distichis, subellipsoideis utrinque obtusiusculis, 20 \times 8, transverse 5-septatis, loculis 1-3 longitudinaliter divis, ad septum medium præcipue constrictis, hyalinis.

Hab. ad ramos dejectos putrescentes Manihot carthagenensis in sepibus prope La Plata, Argentina Amer. austr.

2. *Calyptronectria argentinensis* Speg., l. c. p. 412. — Peritheciis subglobois 250-300 μ . diam., basi ligno insculptis, carnosulis, glabris, ostiolo crasso brevi nigrescente coronatis; ascis linearibus breviter pedicellatis 110-150 \times 15, paraphysibus filiformibus obvallatis; sporidiis monostichis non v. leniter subfusioideis utrinque sæpius obtusiusculis, 20-24 \times 7-9, ad septa constrictulis, 5-septatis, loculo medio supero sæpius septo longitudinali diviso.

Hab. ad caules aridos putrescentesque Fœniculi piperiti Santa Catalina prope Buenos Aires Argentina Amer. austr.

MEGALONECTRIA Speg. — Syll. II p. 560, IX p. 992, XVI p. 599, XVII p. 815.

1. *Megalonectria Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 5006 (1908) p. 129. — Peritheciis cæspitosis, subglobosis, sessilibus 200-250 μ . diam. rubris, carnosulis glabris, in sicco sæpius collabescen-
tibus, sæpius Stilbæ 1- v. 5 cingentibus; Stilbis erectiusculis e pe-
dicello, 1-5 mm. long., 0,1-0,2 mm. cr., et capitulo subgloboso ro-
seo-aurantio 0,5-0,7,5 mm. diam. constitutis; conidiis obovatis 6-
8 \times 2,5-4, hyalinis, ? catenulatis; ascis cylindraceo-subclavatis sur-
sum obtusissime rotundatis crassiusculeque tunicatis 100-120 \times 20-
25, tetrasporis v. octosporis, aparaphysatis v. pseudoparaphysatis;
sporidiis ellipsoideis v. elongato-clavulatis 3-5- v. 7-9-septulatis,
25-40 \times 10-14, v. 30-45 \times 10-12, ad septum medium valide constri-
ctis, loculo uno alterove septo longitudinali diviso, hyalinis.

Hab. vulgata ad ramos emortuos putrescentes Ilicis para-
guariensis, Rep. Argentina Amer. austr. — Species facile in
duas (altera ascis tetrasporis subparaphysatis sporidiisque bre-
vioribus 3-5-septatis, altera ascis octosporis aparaphysatis sporidiis
longioribus) dividenda. — *Meg. cæspitosæ* Speg. affinis.

2. *Megalonectria madagascariensis* P. Henn., in Voeltzkow Reise 5007
Ostafrika III (1908) p. 29, taf. III, fig. 21. — Peritheciis solita-
riis v. gregarie erumpentibus, subglobosis, sicco collapsu-cupulatis,
atro-castaneis, 200-260 μ . diam. contextu cellulosis rufo-brunneis;
ascis clavatis, obtusis, 60-90 \times 15-20, octosporis; paraphysibus fili-
formibus hyalinis, 2-2,5 μ . cr.; sporidiis oblique monostichis vel
subdistichis, oblonge ellipsoideis, ovoideis v. subfusoides, 15-21 \times
8-10, flavido-fusculis, 5-7-septatis, muriformibus; conidiophoris
solitariis v. fasciculatis, stilbiformibus, rigidis, stipite pallido-nigri-
canti c. 15 mm. longo, 150 μ . cr., capitulo hemisphaerico v. sub-
globoso, atro-brunneo, conidiis ellipsoideis vel ovoideis, 5-6 \times 3,
hyalinis.

Hab. ad corticem arborum, Fénérive Madagascar.

TREUBIOMYCES v. Höhn., Fragm. Mykol. VIII (1909) in Sitzb. k.
Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1180 (Etym. a cl. doct.
MELCH. TREUB. recens demortuo, jam meritissimo direttore Institutii
botanici javanici). — Omnino superficialis; subiculum tenui-mem-

branaceum, ex hyphis hyalinis constitutum, dense verrucis parenchymaticis apice setula singula auctis tectum; perithecia mollicarnosa, pallida, hemisphærica, ostiolo rotundato depresso setulis nigris circumdato prædita; asci aparaphysati clavati, quadriotto-spори; sporidia hyalina, muriformi-septata.

1. *Treubimyces pulcherrimus* v. Höhn. l. c. p. 1181, fig. 1. — Su. 5008
biculo rotundato 4-5 mm. lato, pelliculas hyalinas tenues reticulatim erumpentes, 5-6 μ . circ. cr. formante; hyphis pluriguttulatis crebro septatis 3-6 μ . cr., stratum unicum formantibus; peritheciis sparsis hemisphæricis basi applanatis, subcarnosis, flavido-incarnatis, 300 μ . latis, ostiolo impresso 12 μ . lato præditis, setulis (æque ac illis in subiculo sparsis) acicularibus rigidulis acutis 120-200 \approx 8-9 e bulbillo parenchymatico orientibus; perithecii contextu pluristratoso ex cellulis 8-10 μ . diam. formato; ascis aparaphysatis, rosulatis, crasse clavatis, apice rotundatis, basi obtuse cuneatis, octosporis, 60-70 \approx 25-28, tunica 5 μ . cr.; sporidiis pluriseriatis cylindraceo-oblongis v. subclavulatis utrinque rotundatis, hyalinis, plerumque 7-septatis, septisque longitudinalibus partitis, guttulatis, 34-38 \approx 8-9.

Hab. in pagina superiore foliorum Fici elasticæ, socio mycelio *Limacinulæ samoensis* in Horto alpino prope Tjibodas in ins. Java.

Sect. 7. Phæodictyæ.

PELORONECTRIA A. Moell. — Syll. XVI p. 599.

1. *Peloronectria umbilicata* Syd., Ann. Mycol. V (1907) p. 358. — 5009
Stromatibus tuberiformibus, globoso-lenticularibus vel depresso-globosis, medio, præcipue in juventute, umbilicatis, lignosis, primo albido-flavis, tandem atro-brunneis vel atris, $\frac{1}{2}$ -1 cm. diam. matricem non ambientibus, tota superficie peritheciis globosis 150-200 μ . diam., dense obsessis; ascis 25-40 \approx 10-12, octosporis; sporidiis bi-tristichis, oblongis, 3-septatis, non v. vix constrictis, raro cellula una media septo longitudinali vel obliquo percursa, utrinque obtusis, fuscis, 10-16 \approx 4 $\frac{1}{2}$ -6.

Hab. in ramis Eugeniæ sp. Sao Francisco dos Campos Prov. Sao Paulo, Brasilia.

ULEOMYCES P. Henn. — Syll. XI p. 364.

1. *Uleomyces decipiens* Syd., Ann. Mycol. VII (1909) pag. 174. — 5010
Stromatibus hypophyllis, maculis indeterminatis pallidis insidentibus, sparsis, rotundatis, 0,5-2 mm. diam., hemisphærico-applanatis, atro-sanguineis; peritheciis numerosis, immersis; ascis subglobosis v. late ovatis, apice incrassatis, sessilibus, 32-44 × 25-35, octosporis, aparaphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, primo 3-septatis, hyalinis v. brunneolis, dein 3- raro 5-septatis, brunneis, medio constrictis, semel longitudinaliter septatis, 20-28 × 10-14.

Hab. in foliis vivis *Quercus thalassicæ*, Hiji Kure-mura Tosa, Japonia (YOSHINAGA).

Sect. 8. Scolecosporæ.

OPHIONECTRIA Sacc. — Syll. II p. 563, IX p. 994, XI p. 365, XIV p. 651, XVI p. 601, XVII p. 815.

1. *Ophionectria ? anomala* Racib., Bull. Acad. Sc. Cracovie (1906) 5011
p. 910. — Peritheciis candidis breviter cylindraceis, 220 μ . alt., 190 μ . lat., vertice obtusis, pulvinulo albo minuto insidentibus, crasse tunicatis, superficie granulosis, cavitate phialiformi 170 × 100, ostiolis non emergentibus; ascis cylindraceis paraphysibus hyalinis, septatis, obvallatis, 160 × 8-10, octosporis, apice rotundatis; sporidiis filiformibus asci longitudine parallelis vel tortis, septatis, in articulos 8 × 1,5 secedentibus.

Hab. in pagina inferiore foliorum viventium *Hydnophyti* sp. prope Buitenzorg Ins. Javæ. — Species ob stromatis et paraphysium præsentiam in genere anceps.

2. *Ophionectria cupularum* Kirschst., Verh. Bot. Ver. Brandenb. 5012
XLVIII (1906) p. 60. — Peritheciis solitariis v. acervatis, pallide brunneis breviter obscurius papillatis, circa papillam denique umbilicatis, globosis, minutissimis, membranaceis; contextu minute celluloso, brunneo; ascis cylindraceis apice rotundatis incrassatisque, breviter pedicellatis, 8-sporis, 100-110 × 8-10; sporidiis distichis, hyalinis, intus guttulato-granulosis, parallelis, denique pluricellularibus, utrinque acutis, rectis, curvulisve, 50-60 × 4; paraphysibus nullis.

Hab. in cupula sub foliis putrescente *Quercus pedunculatæ* in silvis Borussiae.

Syll. fung. XXII (X-1912)

3. *Ophionectria ambigua* v. Höhn., Ann. Myc. III (1905) pag. 550, 5013
cum icon. — Peritheciis globosis, ostiolo papilliformi præditis, 500 μ . diam., solitariis v. gregariis, superficialibus, levibus, opacis, rugulosis, obscure rubro-brunneis, aqua immersis substantiam rubro-violaceam emittentibus, coriaceo-membranaceis, non carbonaceis; paraphysibus filiformibus, immersis, mox diffluentibus; ascis numerosis, clavatis, tunica tenui præditis, supra angustatis, obtusis, uniformiter pedicellatis, 250×10 , octosporis; sporidiis tristichis, subhyalinis v. pallidissime brunneolis, cylindraceis, apice rotundatis v. subacutatis, 5-8-septatis, quoque loculo 1-2-guttulato, rectis v. leniter curvulis, 65×5 .

Hab. in ligno pineo putri, Altenmarkt in Austria inf.

4. *Ophionectria cylindrothecia* Seaver, Mycologia I (1909) pag. 70, 5014
tab. IV fig. 4. — Peritheciis gregariis v. sparsis clavato-cylindraceis v. fusoides, basi stipitiformi præditis, flavidis, diaphanis, subglabris, siccis duriusculis, sæpe basi hyphis septatis parce cinctis, $275-300 \times 125-150$; ascis cylindraceis v. clavatis, octosporis, $100-125 \times 12-15$; sporidiis elongatis utrinque tenuatis e hyalino dilutissime flavidis, 7-12-septatis, $60-75 \times 5$, paraphysibus obsoletis.

Hab. in culmis putrescentibus Zeæ Maydis, Ohio Amer. bor.

— Sporidia intra ascum veluti membrana propria inclusa videntur.

5. *Ophionectria ? flavida* (Rick) Sacc. et Trott., *Cyanocephalum flavidum* Rick, Broteria V (1906) p. 224. — Peritheciis solitariis v. parce aggregatis, ovoideis, flavidis, 0,5 mm. diam., carnosomembranaceis; ascis lageniformibus, 150 μ . longis, ventre 40 μ . cr., fere sessilibus; sporidiis primitus vermiculatis, plurimis, in fragmenta numerosissima secedentibus, hyalinis, articulis 3×2 v. diversæ longitudinis; paraphysibus nullis,

Hab. in ligno putrido in Brasilia. — A typo generis ascis lageniformibus recedit, sed a *Cyanocephalio* sporidiorum fabrica omnino differt.

TRICHONECTRIA Kirschst., Verh. Bot. Ver. Brand. XLVIII (1906) p. 60 (Etym. *thrix* capillus et *Nectria*). — Perithecia superficialia, solitaria v. parce cæspitulosa, tenuia, membranacea, setulis spinuliformibus albis vestita; contextu subhyalino, prosenchymatico. Asci ovoidei, octospori. Sporidia fusioidea, pluricellularia, hyalina. Pseudoparaphyses e cellulis globulosis majusculis conflatae. — A gen. *Calonectria* et *Ophionectria* imprimis peritheciis aculeolatis distinctum genus.

1. *Trichonectria aculeata* Kirschst., l. c. p. 60. — Charact. generis. 5016
Perithecia globoso-depressa, rubenti-flavida, tenera, aculeolis 80 \approx 14 vestita, 200-300 μ . diam.; asci 50-65 \times 18-25; sporidia disticha, denique 8-cellularia, recta, fusioidea, 35-54 \times 5-6.

Hab. in cortice trunci adhuc stantis, emortui *Abietis* *excelsæ* in silvis Borussiae.

TRELEASIA Speg. — Syll. XIV p. 640.

1. *Treleasia* ? *musicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 5017 (1909) p. 411, cum icon. — Peritheciis constipatis subiculo gossypino obovolutis 60-65 μ . diam., 100-120 μ . long., supra, in ostiolum cylindraceum 60-200 \times 20-30 productis; ascis ellipsoideo-fusioideis basi cuneatis breviter tenuiterque pedicellatis, 75-80 \times 15, aparaphysatis, tetrasporis; sporidiis lineari-fusioideis acutissimis, primo continuis dein 3-septatis, non constrictis, 60-75 \times 7-8.

Hab. ad rhachides putrescentes Musarum, La Plata Rep. Argentina Amer. austr. — Species a *T. Sacchari* Speg. peritheciis minoribus, ascis gracilioribus evidentius pedicellatis et præcipue sporidiis 3-septatis recedens.

- COPRANOPHILUS** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 410 (Etym. *copranon* fimum et *philos* amicus). — Perithecia cæspitosa, cylindraceo-conoidea, albicantia; asci ellipsoidei subsessiles, aparaphysati octospori; sporidia angustissime lanceolata 1-septata, hyalina, ascum subæquantia. — Genus pulchellum *Treleasie* cognatum, fimicola.

1. *Copranophilus spinuliformis* Speg., l. c. p. 410, cum icon. — Acer- 5018
vulis subglobosis parvis, 3-4 mm. diam., albo-cinerellis, spinuloso-hirtis; peritheciis constipatis, globosis, ostiolo corniformi quadruplo longiore armatis, totis 100-120 μ . diam., 100-150 μ . alt.; ascis constipatis ellipsoideis, sessilibus, 80 \times 30, aparaphysatis; sporidiis subclavulatis, apice altero acutissimis altero obtusiusculis, 60-70 \times 5, diu continuis, serius 1-septatis.

Hab. in alveolis Coleopterorum in fimo vaccino arido pr. La Plata Rep. Argentina Amer. austr.

TUBEUFIA Sacc. et Penz. — Syll. XIV p. 652.

1. *Tubeufia Helicomycetes* v. Höhn. Fragm. Myk. IX. (1909) in Stzb. 5019
k. Ak. d. Wiss. Wien, CXVIII, Abt. I, pag. 1477. — Subiculo in maculis nigricantibus insidenti, tenui, effuso, ex hyphis 4-5 μ .

lat. constituto, conidiis *Helicomycetis* (hyalinis v. leniter cyaneis 150 \approx 3-4,5, septatis) tecto; peritheciis gregariis, erectis, elongatis, 250-300 μ . alt., 130-150 μ . latis, carnosio-membranaceis, basi albis v. leniter cyaneis, supra flavidis, apice obtusulis ochraceis, infra levibus supra asperulis; contextu parenchymatico; paraphysibus filiformibus, 1-1,5 μ . cr., supra nodoso-ramosis, numerosis; ascis cylindraceutis, supra rotundatis tunica crassa præditis basi in pedicellum brevem angustatis, 150-170 \approx 12-13, suboctosporis; sporidiis filiformibus, 4 μ . latis, hyalinis, demum cyanescentibus, septatis, articulis 5-7 μ . long.

Hab. in graminaceis emortuis, Biberbach prope Sonntagsberg Austriæ inf. (STRASSER).

BARYA Fuck. — Syll. II p. 563, IX p. 997.

1. *Barya parasitica* Fuck. — Syll. II, pag. 562 et IX, pag. 997 — 5020
var. *cæspitosa* Peck 43 Rep. (1890) pag. 33, t. IV, f. 13-17. — Peritheciis in cæspites dense confertis et sæpe in rostellum satis longum productis; ascis sporidiisque quam in typo paullo angustioribus et longioribus.

Hab. parasitica in peritheciis Bertie moriformis ad ligna faginea, in Mont. Catskill Amer. bor.

2. *Barya montana* Racib., Bull. Acad. Sc. Cracovie (1906) p. 909. — 5021
Peritheciis longe ovoideis, in mycelio stilbaceo subsuperficialibus, 750-900 μ . alt. et 400 μ . lat., apice rotundatis et ostiolis non emergentibus rotundis præditis, contextu flavido et firmo, circumcirca mycelio flocculoso albo obductis; ascis aparaphysatis longe linearibus apice acute conicis ibique incrassatis, octosporis, 300 \approx 4-5; sporidiis filiformibus hyalinis rectis v. spiralibus dein in ipso asco in articulos innumeros lineares secedentibus.

Hab. ad Araneas in ramis Podocarpi cupressinæ, in M. Gedeh ins. Javæ. — Status conidicus *Stilbi* formam sistit.

3. *Barya salacensis* Racib., Bull. Acad. Sc. Cracovie (1906) p. 909. 5022
— Mycelio hypophyllo sulphureo, plagulas rotundas 5-7 mm. latas convexulas formante; peritheciis numerosis in medio plagulæ superficialibus, globosis vel semiglobosis, 0,7 mm. latis, cavitate 420 \approx 300, ovato-phialiformibus, pariete crasso non omnino levi sulphureo, ostiolis applanatis; ascis aparaphysatis fasciculatis, hyalinis, longe linearibus 400 μ . long. apice incrassatis et conicis, initio octosporis; sporidiis asci longitudine filiformibus spiraliter convo-

lutis dein in articulos innumeros secedentibus, 12-14 μ . cr., articulis 10 \approx 2,5, hyalinis.

Hab. ad Aphides in pagina inferiore foliorum Castaneæ argenteæ et Lasianthi sp., in Mont. Salak et Gedeh ins. Javæ.

4. *Barya lichenophila* Ferd. et Winge, Botan. Tidsskr. XXIX (1908) 5023 p. 312, fig. 4. — Peritheciis in sicco corneis, dense gregariis, liberis, bysso argillaceo-subroseola insidentibus, eaque primum vestitis, dein subnudis, conicis, parum ventricosus, succineis vel demum fuscidulis, 350-500 \approx 250-350, ascos maturos per apicem pertusum ejaculantibus; peridio pseudoparenchymatico, parvi-cellulari, oleoso, sub vitro diaphano; filamentis byssi sub vitro hyalino-fuscidulis, crebre septatis, guttulis oleosis repletis, ad 7 μ . lat.; ascis angustissime cylindraceis, apicem versus lenissime attenuatis, globulo terminali circ. 4 μ . diam. instructis, postice leniter sensimque attenuatis, sessilibus, 165-175 \approx 5-5,5; sporidiis ascos adæquantibus, octonis, eseptatis, filiformibus, $\frac{3}{4}$ μ . lat., hyalinis.

Hab. ad thallum subputridum Cladoniæ sub Calluna humi jacentem prope Borris Jutlandiæ.

OOMYCES B. et Br. — Syll. II p. 564, XVI p. 606.

1. *Oomyces javanicus* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVI, 5024 Abt. I (1909) pag. 314, cum icon. — Stromatibus superficialibus solitariis v. 3-4 connatis globosis v. ovoideis, flavidis 0,5 mm. d.; peritheciis ovoideis quoque stromate singulis immersis, flavis 350 \approx 250, ostiolo rotundo; paraphysibus copiosis ramosis et anastomosantibus; ascis tereti-clavatis apice rotundatis basi in stipitem brevem tenuatis 190-200 \approx 14-16; sporidiis tereti-fusoideis apice 3 μ . cr., medio 4-5 μ ., deorsum attenuatis et 1,5 μ . cr., 160 μ . long., pluriseptatis, articulis superioribus 8-10 μ . mediis 4 μ . long.

Hab. in pagina inf. foliorum Vaccinii varingæfolii, Mt. Pangerango Javæ.

2. *Oomyces incanus* Rehm, Ann. Mycol. (1905) p. 227. — Peritheciis 5025 sparsis, raro gregariis, sessilibus, lageniformibus, versus apicem attenuatis ibique apertis, scabriusculis, fuscidulis, mollibus, 500 μ . alt., 350 μ . lat., contextu parenchymatico, intus hyalino, extus dilute fuscidulo, siccis incano-pulverulentis; cylindraceis, apice rotundatis, c. 300 \approx 5, octosporis; sporidiis filiformibus, continuis, rectis, hyalinis, asci longitudine 0,5-0,8 μ . lat., parallele positæ; paraphysibus filiformibus, rectis, hyalinis, 1 μ . cr.

Hab. ad folia præteriti anni sicca *Solidaginis Virgaureæ* in valle Kirnitz prope Scandau, Saxonia (W. KRIEGER).

TORRUBIELLA Boud. — Syll. IX p. 994, XI p. 365, XVII p. 816.

1. *Torrubiella brunnea* v. Keissl., Ann. Mycol. VII (1909) p. 292. — 5026

Stromate subcirculari, explanato, byssaceo, c. 2-3 mm. diam., primum pallido, mox brunneo, hyphis longis, subrectis, vix ramosis, crasse tunicatis, hyalinis, demum subbrunneolis (c. 4 μ . diam.) composito; peritheciis supra stroma (imprimis margine stromatis) gregariis, numero c. 10-25, oblongo-conicis, breviter rostratis, subrectis, brunneis, pilis longis, simplicibus, subflexuosis, crasse tunicatis, leviter brunneis (c. usque ad 90 \approx 4 metientibus) tectis, c. 500 \approx 150; ascis filiformibus, numerosis, c. 270 \approx 6, 8-sporis, apice crasse tunicatis; paraphysibus paucis, filiformibus, apice leviter capitatis, sparse guttulatis; sporidiis rectis, ut videtur continuis nec in articulos secedentibus, guttulatis, c. 270 \approx 1.

Hab. in Coccide quodam foliis *Melicopis* insidenti, in insula Samoa Upolu prope Leulumoenga (RECHINGER).

2. *Torrubiella sericicola* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5027

CXVIII, Abt. I (1909) p. 302. — Peritheciis subiculo parco arcte adnato insidentibus, solitariis v. seriatis v. sparsis v. sæpe 2-pluribus basi connatis, flavis v. aurantiis, carnosio-membranaceis mollibus, ellipsoideis conico-papillatis 160-180 \approx 95-100, extus ob cellulas hemisphæricas prominulas 8 μ . diam. verruculosas; ascis copiosis clavato-cylindræis 90 \approx 5, deorsum tenuatis, supra capitulatis, 8-sporis; sporidiis filiformibus 80-90 \approx 1,3-1,4 cr., crebro septatis, jam in asco in articulos 4-5 μ . long. dilabentibus, paraphysibus tenuissimis asco brevioribus.

Hab. in folliculis sericeis flavis *Criculæ* trifenestratæ prope Buitenzorg ins. Javæ.

3. *Torrubiella ochracea* Patouill., Bull. Soc. Myc. Fr. XXII (1906) 5028

pag. 58. — Stromate pallide ochraceo, lanoso, effuso vel tuberculiformi; peritheciis levibus, succineis, ovoideo-conicis, 500 \approx 300, basi immersis, gregariis; ascis longissimis, 5 μ . cr., apice capitatis, octosporis; sporidiis linearibus 1 μ . cr., hyalinis, multiseptatis, in articulos cylindræos 6-8 μ . long. dilabentibus.

Hab. in corpore *Lepidopteri* adulti cujusdam, *Papeenoo Polynesia*. — *T. tomentosæ* affinis.

HYPOCRELLA Sacc. — Syll. II p. 579, IX p. 1002, XI p. 367, XIV p. 653, XVI p. 603, XVII p. 817.

1. *Hypocrella Sydowii* Sacc. et Trott., *Hypocrella globosa* Syd., Ann. 5029

Mycol. V (1907) p. 359, non Racib. — Stromatibus omnino globosis, hypophyllis vel ramicolis, sparsis v. aggregatis, in foliis plerumque nervos sequentibus, 2-5 mm. diam., primo ochraceis, tandem atris, in sicco duris lignosis, superficie ob perithecia parum prominula verrucoso-tuberculatis, subiculo nullo; ascis longe cylindraceis, apice rotundatis, deorsum attenuatis, 70-100 \approx 7-9, octosporis; sporidiis filiformibus, ascorum fere longitudine, intra ascos jam in articulos secedentibus; articulis sporidiorum oblongo-cylindraceis, utrinque rotundatis, hyalinis, 6-7 \approx 2-2 $\frac{1}{2}$.

Hab. in foliis ramisque Melastomataceæ cujusdam, Sao Francisco dos Campos, Sao Paulo Brasilæ.

2. *Hypocrella globosa* Racib., Bull. Ac. Sc. Cracovie (1906) p. 907. 5030

— Stromatibus globosis basi angustata in pagina superiori foliorum insidentibus, 2-3,5 mm. diam., cartilagineis, griseo-nigris, intus albidis; peritheciis subpiriformibus et supra collo elongato præditis, 360-400 \approx 100-122, parietibus flavo-aurantiacis, immersis sed ostiolo papilliformi, prominulis; paraphysibus nullis; ascis linearifusoideis, apice rotundatis, 160-190 \approx 8, octosporis; sporidiis anguste linearibus in asco secedentibus et tunc articulis breviter cylindraceis, hyalinis levibus, 2,5 \approx 1-1,5.

Hab. in foliis præcipue ad nervos Castilloæ elasticæ, Buitenzorg in ins. Java.

3. *Hypocrella Grewiæ* Koord., Botan. Untersuch. (1907) pag. 179, 5031

fig. 13 III. — Stromatibus amphigenis, sparsis, carnosus, pulvinatis, sessilibus, applanatis, pulchre aurantiacis, papillato-ostiolatis, 2-2,5 mm. diam., peritheciis immersis; ascis linearibus, apice obtusis et haud incrassatis, 120-130 \approx 6-8; sporidiis filiformibus 100-110 \approx 1,5-2, hyalinis in articulos innumerabiles secedentibus.

Hab. in foliis vivis Grewiæ Micrococci prope Gombong Java, martio 1905 (KOORDERS).

4. *Hypocrella Schizostachyii* P. Henn., Hedw. XLVII (1908) p. 253. 5032

— Stromatibus hemisphaerico-tuberosus, carnosus-lignosis, duris, botryose, verrucosis, cinereo-testaceis, intus subaurantiacis c. 1,5-2 cm. diam.; peritheciis immersis ovoideis, ostioli punctiformi-prominulis, rufo-brunneis; ascis cylindraceis, vertice hemisphaerico rotundatis, 8-sporis, 100-160 \approx 6-8; sporidiis filiformibus plurise-

ptatis, mox in asco secedentibus, cellulis cylindraceis, 5-8 \times 1,5-2, hyalinis.

Hab. in ramulis vivis *Schizostachyi* spec., Luzon, Prov. Rizal ins. Philippin. (F. W. FOXWORTHY).

5. *Hypocrella Möllii* Koords., Bot. Untersuch. (1907) p. 179, f. 13 II. 5033

— Stromatibus carnosulis, disciformibus, 2-4 mm. diam. albis, hypophyllis, sparsis, papillato-ostiolatis; peritheciis stromate immersis; ascis linearibus 170-180 \times 7-8, apice rotundatis et haud incrassatis, 8-sporis, paraphysatis; sporidiis filiformibus, ascos subæquantibus, 170-175 \times 1,5-2, hyalinis, multiseptatis, in frustula 15-17 μ . longa, utrinque truncata dilabentibus.

Hab. in foliis emortuis *Premnæ tomentosæ* cultæ prope Kaliwiro prov. Kedu Java (KOORDERS).

6. *Hypocrella Engleriana* Koord., Botan. Untersuch. (1907) p. 177, 5034

fig. 13 I. — Stromatibus carnosus, pulvinatis, basi constrictis, extus fuscis, 0,5-1 mm. cr. hypophyllis; peritheciis immersis; ascis cylindraceis 60-65 μ . longis, 4-5 μ . latis, 8-sporis; sporidiis filiformibus asci longitudinem subæquantibus, 1 μ . latis, dense minute septulatis ac guttulatis, tarde in articulos secedentibus.

Hab. in foliis emortuis *Mangiferae indicæ* Pennuggolan prov. Kedu Java (KOORDERS). — Est verisimiliter status ascophorus *Aschersonia lecanioidis* Henn.

7. *Hypocrella Weberbaueri* P. Henn., Engl. Jahrb. XL (1907) p. 226. 5035

— Stromatibus foliiculis superficialibus, hemisphærico-pulvinatis, carnosos-corneis, aurantiacis, ostiolis obscurioribus punctoideis, 3-4 mm. diam., subiculo membranaceo, pallido c. 1 mm. lato; loculis immersis ovoideis, pallidis; ascis filiformi-fusoideis, apice attenuatis capitellatis, 1-sulcatis, 5-7 μ . latis, basi attenuatis, 8-sporis, 250-300 \times 10-16; sporidiis flexuosis, linearibus, mox in particulas fusoides utrinque acutiusculas, 15-20 \times 2-3 dilabentibus.

Hab. in foliis *Marantaceæ* ejusd., inter Monzon et Huallaga Dep. Huanaco, Peruvia (WEBERBAUER). — Ad *Møllerellam* transit.

8. *Hypocrella Warneckeana* P. Henn., Engl. Jahrb. XXXVIII (1905) 5036

p. 113. — Stromatibus carnosos-ceraceis, subrotundatis, tuberculosus, 1-1,5 mm. diam., gregarie sparsis hypophyllis, pallide flavidulis subfarinosis; peritheciis 3-15, subliberis, ovoideis v. subglobosis, pruinosis-subvelutinis, vertice poroso-ostiolatis, c. 200-250 μ .; ascis cylindraceis, apice hemisphærico-capitellatis, octosporis, 170-200 \times 5-7; sporidiis in cellulas subfusoides, hyalinas, 10-12 \times 2, dilabentibus.

Hab. in foliis *Myrianthi arborei*, Amani Ost-Usambara Africæ centr. (WARNECKE).

9. *Hypocrella coronata* v. Höhn., *Ergeb. Bot. Exp. Sübras.* (1901) 5037

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 22.

— Stromate flavido, pallido, sparso, amphigeno, superficiali, discoido, medio fortiter depresso, peripherice irregulariter crasseque marginato, 3-4 mm. lato, in membrana 2-3 mm. lata, albida insidenti, margine aculeis plus vel minus numerosis, usque ad 1 mm. long. pluries seriatis prædito; contextu stromatico ex hyphis 4-5 μ . crassis tunica firma præditi constituto; peritheciis omnino immersis quandoque verruciformi prominentibus, 400-500 μ . alt. 200 μ . latis, ellipsoideis, supra subcolliformi attenuatis, epapillatis; ostiolo minuto, brunneo; parietibus 25 μ . circ. cr., subparenchymaticis; paraphysibus nullis; ascis cylindraceis elongatis 8-10 μ . cr.; sporidiis filiformibus in asco mox in articulos cylindraceos hyalinos utrinque acutos, 8-10 \times 1,5 secedentibus.

Hab. in foliis *Myrtaceæ* cujusdam, Mangaguá prope Santos Brasilæ. — *H. citrinæ* Speg. affinis.

10. *Hypocrella bispora* v. Höhn., *Fragm. Mykol.* VII (1909) in *Stzb.* 5038

k. Ak. d. Wiss. Wien CXVIII, p. 826. — Stromatibus amphigenis superficialibus, sparsis, ex umbrino nigris, crasse scutellatis, medio umbonatis, 1-5 mm. cr., margine rotundatis obtusis 1 mm. cr., rotundatis 4-5 mm. long. et in membrana basali facile secedente, albida, medio usque ad 200 μ . cr. insidentibus; ostioliis rotundatis depressis, non prominentibus, 20-25 μ . latis; contextu stromatico intus pallido, valido, plectenchymatico; peritheciis in stratu peripherico omnino immersis, subovoideis 220-280 \times 110-120, parietibus 12-16 μ . cr., collo usque ad 120 μ . longo, raro nullo et tunc peritheciis 160 \times 95; ascis aparaphysatis, cylindraceis, supra rotundatis, 120-140 \times 4-5 plerumque bisporis; sporidiis filiformibus ascum longitudine æquantibus, in eodem asco in articulos cylindraceos 4-6 \times 1,5 secedentibus.

Hab. in foliis *Pinangæ* sp. et in *Coccidiis* eorundem, in silva primæva Salak pr. Buitenzorg in ins. Java (SCHIFFNER).

11. *Hypocrella palmicola* P. Henn., in Voeltzkow, *Reise Ostafrika* 5039

III (1908) p. 29, tab. III, fig. 23. — Stromate plano-pulvinato, suborbiculari, atro-fusco c. 5 mm. diam., ostioliis granulatis; peritheciis ovoideis immersis; ascis cylindraceis, apice rotundato-capitellatis, octosporis, 60-80 \times 3,5-4; sporidiis filiformibus pluriguttulatis, septulatis, 0,6-0,8 μ . cr.

Hab. ad folia *Palmae* cujusdam, Ile aux Prunes, Madagascar.

12. *Hypocrella cretacea* v. Höhn., Stzb. k. Ak. d. Wissensch. Wien 5040
CXVIII, Abt. I (1909) pag. 311. — Stromatibus albis cretaceis, senio ochraceo-flavidis, pulvinatis, inæqualiter orbicularibus v. oblongis, 2,6 mm. latis, 1-1,5 mm. alt.; ostiolis griseo-brunneis punctatis, basi contractis subsessilibus; peritheciis immersis ovoideis ampulliformibus collo 120 × 60-80, totis 500 × 220; paraphysibus nullis; ascis cylindricis utrinque leviter tenuatis 4-8-sporis, longitudine perithecii 5-9 μ . cr.; sporidiis filiformibus ascum subæquantibus, in articulos cylindricos, 6-9 × 2, jam in asco dilabentibus.

Hab. in margine vaginarum foliorum *Amomi* sp. longe seriatim disposita, in scutellis *Coccidiorum* parasitica in silvis Tjibodas ins. Java. — Affinis *Hyp. Amomi* Rac.

13. *Hypocrella botryosa* Syd., Ann. Myc. VIII (1910) pag. 40. — 5041
Stromatibus epiphyllis, superficialibus, 2-3 mm. latis, sparsis, e parte media majuscula et processibus ovato-globosis v. ovatis botryose aggregatis compositis, succineis v. succineo-aurantiacis; peritheciis omnino immersis, minutissimis, paucis in processibus sitis; ostiolis haud prominulis punctiformibus; ascis cylindraceis, apice rotundatis, octosporis, 130-225 × 8-14; sporidiis filiformibus, mox in asco secedentibus; cellulis sporidiorum subfusoides, hyalinis, 8-11 × 2,5.

Hab. in foliis vivis ? *Cyperaceæ* (margine acute spinulosis), Dumagnate in Cuernos Mt. prov. Negros or. in ins. Philippinis. (A. D. E. ELMER). — *Hypocrellæ Warneckeanae* affinis.

14. *Hypocrella Amomi* Racib., Bull. Ac. Sc. Cracovie (1906) p. 908. 5042
— Stromate ex albo flavido tincto; hypothallo subrotundo, albo, acute marginato, initio suffulto, sursum in stroma album 1-2 mm. altum et usque ad 4 mm. latum abeunte, intus albo supra minute colliculoso; peritheciis in colliculis nidulantibus, phialiformibus, ostiolis longicollibus sed non emergentibus, parietibus flavis; peritheciis 210 μ . lat. collis 550 μ . long.; ascis aparaphysatis 400 × 8-10 sublinearibus, apice paullo crassioribus, truncatis, initio octosporis; sporidiis filiformibus stipatis mox in articulos innumeros secedentibus, articulis fusoides 13-16 × 2.

Hab. parasitice ad *Aphides* in pagina inferiore foliorum *Amomi* sp. prope Salak ins. Javæ.

15. *Hypocrella convexa* Racib., Bull. Ac. Sc. Cracovie (1906) p. 908. 5043
— Stromatibus albis v. flavidis, globosis, 2-4 mm. cr., basi applanatis levibusque sursum convexis, acute marginatis, coriaceo-tenui-

bus, cortice flavo 25 μ . cr. ostiolis non emergentibus, minutis, rotundis punctato; peritheciis omnino immersis phialiformibus, albo tunicatis longicollibus, 540 \approx 160-190; ascis aparaphysatis cylindraceis apice subtruncatis 210 \approx 15, initio octosporis; sporidiis filiformibus hyalinis mox in articulos bacillares utrinque rotundatos 5-8 \approx 1 secedentibus.

Hab. in scutellis Coccidiorum in foliis Myristicæ et Garciniæ, Depok et Buitenzorg ins. Javæ.

EPICHLOË Tul. — Syll. II p. 578, IX p. 1001, XI p. 367, XIV p. 655, XVI p. 607.

1. *Epichloë Kyllingiae* Racib., Bull. Acad. Sc. Cracovie (1906) p. 902. 5044
— Stromate epicaulino, brunneo-nigro 2-20 mm. longo, 350-500 μ . cr., margine tenuiori nigro et sterili, pulvinato, levi vel are-scendo verruculoso, intus pallide brunneolo; peritheciis ovoideo-elongatis 320-380 \approx 95-120, non prominentibus; paraphysibus nullis; ascis linearibus, 180-210 \approx 5, apice rotundatis, octosporis; sporidiis linearibus, hyalinis, septatis, et in articulos 1 μ . cr., etiam in asco secedentibus.

Hab. in caulibus *Kyllingiae* monocephalæ, in herbis prope Buitenzorg ins. Java.

FLEISCHERIA Penz. et Sacc. — Syll. XVII p. 819.

1. *Fleischeria paulensis* v. Höhnelt, Ergeb. Bot. Exp. Südbras 1901, 5045
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) pag. 21. — Stromate valido, nigro-opaco, superficiali, minute verrucoso, rugoso, intus pallido, superficialiter sordide violaceo, rotundato-nodoso usque ad 6,5 mm. lato, basi angustato sterili et late adnato, supra in parte subdistincte limitata fertili; contextu valido parenchymatico et ex hyphis 7-10 μ . cr. constituto; peritheciis immersis confertis, elongato-ellipsoideis supra attenuatis, 350 μ . altis, 150 μ . latis, ostiolo in papillula insidenti; paraphysibus nullis; ascis numerosis, cylindricis, supra rotundatis hemisphaericis fortiter incrassatis, 200 \approx 6-7, octosporis; sporidiis hyalinis ascum subæquantibus filiformibus, 1,5 μ . cr., subparallelis, septatis, sæpe in cellulas cylindraceas 6-8 μ . long. secedentibus.

Hab. in ramulis Melastomaceæ cujusdam, Cantareira, Sao Paulo Brasiliæ.

DUSSIELLA Pat. — Syll. IX p. 1004.

1. *Dussiella Orchideacearum* Rick, Broteria V (1906) p. 42. — Stro- 5046
mate pulvinato, amplexicauli, late aurantiaco-velutino, irregulari,
1 cm. diam.; rigido, carnoso; peritheciis congregatis in tubercula
inter se separata et rubra, ostiolis minutis prominentibus; ascis
70-80 \times 3-5, breviter pedicellatis, octosporis; sporidiis linearibus, vix
3 μ . cr., longitudine asci; paraphysibus purpureis, angustissimis.

Hab. in caule fructifero emortuo Orchideæ epiphytæ (? *Tillandsiæ*), Rio Grande do Sul, Brasilæ.

2. *Dussiella violacea* v. Höhnelt, Ergeb. Bot. Exp. Südbras. 1901, 5047
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 21.
— Stromate rotundato-nodoso, carnoso-compacto, intus non gela-
tinoso, plectenchymatico et ex hyphis e hyalino violaceis septatis
4-11 μ . cr. constituto, 15 mm. lato 9-10 mm. alto, parte sterili
extus intusque plus minusve violacea, levi. minute granuloso-pi-
losa, fertili distincte limitata, pallida ob ostiola peritheciarum pun-
ctulata; peritheciis arcte gregariis subcylindraceis 700-800 μ . long.
et usque ad 180 μ . cr., collo crassiusculo usque ad 45 μ . cr. præ-
ditis; paraphysibus numerosis, rigidis filiformibus 0,5 μ . cr.; ascis
longe pedicellatis, cylindraceis, supra incrassatis, usque ad 500 \times
4-5; sporidiis filiformibus immaturis.

Hab. ad culmos *Bambusæ*, Alto da Serra prope Santos São
Paulo Brasilæ.

CLAVICEPS Tul. — Syll. II p. 564, IX p. 998, XVI p. 609, XVII
p. 820.

1. *Claviceps Rolfii* Stevens et Hall, Botan. Gazette L (1910) p. 462, 5048
fig. 3 a, 4. — Sclerotiis e flavo griseis, globosis, maturis rugosis,
3 mm. circ. cr.; capitulo flavescenti, stipite filiformi 1-1,5 cm.
long. crassiore quam in *Cl. Paspali*; peritheciis cylindraceo-ovoi-
deis 816 \times 225; ascis cylindraceis 375 \times 3; sporidiis filiformibus
260-275 \times 0,5-1.

Hab. in *Paspalo dilatato* America bor,

2. *Claviceps Paspali* Stevens et Hall, Botan. Gazette L (1910) p. 462, 5049
fig. 1, 2, 3 b, 5. — Sclerotiis e flavido griseis, globosis maturis
rugosis, 3 mm. circ. diam.; capitulo flavidulo, stipite filiformi usque
ad 1 cm. longo; peritheciis numerosis ovoideis, 340 \times 119; ascis
cylindraceis 174 μ . longis; sporidiis filiformibus, 101 \times 0,5-1.

Hab. in *Paspalo* levi et dilatato, North Carolina Amer.

bor. — Huc spectant *Sclerotium Paspali* Schw., *Sphacelia Paspali* Bornet, *Spermædia Paspali* Fr.

3. *Claviceps Sesleriæ* Stäger, Centralbl. f. Bakter., II Abt. XVII 5050 (1906) p. 784. — Stromate sive sclerotio vulgo lineari-oblongo, obsolete trigono, recto v. arcuato, e parenchymate densissimo duro albido constante, cujus media parte in stellæ figuram redacta obscura; capitulis crassis, primum pallidis luteolisque, dein purpureo-violaceis; conidiis ovato-ellipsoideis $10,5-14 \times 3,5-7$, nonnihil in medio constrictis prætereaque nucleolis duobus oppositis donatis.

Hab. in inflorescentiis *Sesleriæ* cæruleæ prope Twann Helvetia.

4. *Claviceps Tripsaci* Stevens et Hall, Botan. Gazette, L (1910) p. 463, 5051 fig. 6-8. — Sclerotiiis levibus, ex albo brunneis vel nigris, subconnoideis, basi 4-5 mm. cr.; capitulo e griseo griseo-albo; stipite crasso ex albo purpureo-albido, 1-1,5 cm. longo; peritheciiis numerosis ellipsoideis ore prominulis, $390 \times 153-187$; ascis cylindræis, $145-175 \times 2-3$; sporidiis filiformibus 130μ . longis; conidiis hyalinis, continuis, e fusoides lunulatis, $17,4-37,7 \times 2,9-8,7$.

Hab. in *Tripsaco* dactyloide, America bor.

5. *Claviceps Junci* Adams, Irish Naturalist XVI, n. 5 (1907) p. 168, 5052 fig. 1. — Sporidii (conidiis?) oblongo-ellipsoideis, $7-10 \times 2,8-3,5$, ovaria matricis explentibus; ascis non inventis.

Hab. in ovariis *Junci* glauci in Royal Canal co. Dublin Hibernia (Ireland). — Manifeste forma conidiophora, forte *Sphacelia* sp.

BALANSIA Speg. — Syll. IX p. 999, XI p. 366, XIV p. 656, XVI p. 607, XVII p. 821. — Ad hoc genus, teste Atkinson in Journ. of Mycol. XI (1905) p. 252, essent trahendæ *Epichloe Hypoxylon* Peck et *Dothidea vorax* B. et C.

1. *Balansia gigas* Racib., Bull. Acad. Sc. Cracovie (1906) pag. 905. 5053 — Stromate (an sclerotio?) globoso, 1-2 cm. lato, intus albido et molli, extus cortice tenui flavido-brunneo prædito; stromatibus singulis stipitatis, 30-50 in quoque sclerotii superficie, flavido-brunneis, 1-2 mm. cr., globosis, stipite 1-4 mm. longo præditis, rufobrunneis; capitulis intus albis, cortice firmo, brunneo-rubro tectis; peritheciiis angustè phialiformibus $500 \times 110-140$, immersis, ostioliis minutis; ascis aparaphysatis linearibus, $140-190 \times 3-4$, octosporis; sporidiis filiformibus copiose septatis hyalinis intra ascum non secedentibus.

Hab. in inflorescentiâ nondum evoluta *Paspali* sp., Buitenzorg in ins. Java.

CORDYCEPS Fr. -- Syll. II p. 566; IX p. 998, XI p. 366, XIV p. 656, XVI p. 611, XVII p. 822.

1. **Cordyceps Ouwensii** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5054 Abt. I (1909) p. 309, cum icon. — Stromatibus ex thorace Muscarum eriundis 4-5 mm. long. stipite circiter 200 μ . cr., cylindraceo infra capitulum inæqualiter nodosum; capitulis subglobosis basi apiceque applanatis 1 mm. latis et 0,7 mm. alt. ob ostiola verruculoso-punctatis; peritheciis in quoque stromate 50-60 immersis parallelis 800-900 \times 180-210; paraphysibus nullis; ascis 4 μ . cr. cylindricis; sporidiis filiformibus 1 μ . cr.

Hab. in Muscis emortuis Sukabumi ins. Java (P. A. OUWENS). — Adsunt stromata conidica cylindracea 6-7 μ . longa, apice clavata, conidiis globulosis perexiguus 1 μ . diam. sterigmatibus suffultis. A cæteris speciebus Dipterigenis omnino diversa.

- 2 **Cordyceps rhizoidea** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII 5055 Abt. I (1909) pag. 307. — Mycelio membranaceo insectum obducente; stromata cylindrica radiceformia varie torta ex albo brunneola 7-8 cm. long., 0,5-1 mm. cr. emittente; peritheciis superficialibus cæspitose v. seriatim dispositis 360 \times 300 pallidis; ascis subfusiformibus deorsum acutatis 160-210 \times 13-16, octosporis; sporidiis cylindraceis utrinque acutatis unicellularibus 80 \times 5-7.

Hab. in larvis Coleopterorum ad terram dejectis, Buitenzorg ins. Javæ (P. A. OUWENS). — In subgenerè *Racemella* locanda species.

3. **Cordyceps interrupta** von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5056 CXVIII, Abt. I (1909) p. 303 cum icon. — Stromate cylindrico 52 mm. longo, contorto et subflexuoso, atro-castaneo, basi simplici 1,5 mm. cr., infra medium in ramos ternos erectos 0,5-1 mm. cr. diviso, glabro; peritheciis hinc inde ramis innatis et cæspitulos subverticillatos prominentes efformantibus, ellipsoideis 700 \times 300-350 atro-conico-papillatis; ascis peritheci longitudine fragilibus, apice rotundatis et hemisphærico-incrassatis, cylindricis 3-5 μ . cr. octosporis; sporidiis filiformibus asci longitudine parallelis 1 μ . cr. jam inasco in articulos 3-4 μ . longos dilabentibus.

Hab. in capite cujusdam Coleopteri(?) terra dejecti, Buitenzorg ins. Javæ.

4. **Cordyceps Barberi** Giard., Comptes rend. de la Soc. biol. Paris 5057

(1894) p. 823, Massee in Rev. Mycol. XX (1898) p. 88, tab. 178, f. 34-35. — Aggregata, præsertim in larvæ regione cervicali sita, 2-4 cm. alta, stipitato-clavata, tota albida v. sursum pallide succinea; parte sporigera dimidiam v. tertiam fungi partem æquante, apice acuta et sæpè curvula, 3-4 mm. cr., levi, continua, minutissime (ob ostiola) punctulata; stipite gracili, tomentello; peritheciis ovoideis, omnino immersis; ascis anguste clavato-cylindraceis, apice contracto-capitulatis, octosporis; sporidiis parallelis, leviter tortis, hyalinis, filiformibus, medio lenissime incrassatis, denique multiseptatis, 115-125 μ . longis, articulis 2-5 μ . long.

Hab. in larvis *Diatrææ saccharalis* in culmis *Sacchari* nidulantibus in insulis Barbados et Antigua Antillarum.

5. *Cordyceps clavulata* (Schw.) Ell. et Ev. North Am. Pyrenom. 5058 p. 61, t. XV, *Xylaria clavulata* (Schw.) B. et C. — Syll. I p. 327. — Stromate simplici, clavato; stipite cinereo circ. 3 mm. alt., $\frac{1}{4}$ mm. cr. in capitulum ovoideum v. ellipsoideum, 1 mm. long., 0,5 mm. cr., peritheciis prominulis rugulosum producto, ostiolis vix pertusis; ascis subsessilibus, medio crassioribus, sursum tenuatis sed apice rotundatis, 80-95 \times 8-10; sporidiis filiformibus, multiseptatis, 40-70 \times 1,5-2, articulis 3-5 μ . long.

Hab. ad scutella *Lecanii* ad ramos *Fraxini*, *Prini*, *Olethræ*, *Carpini*, New York, Newfield Canada Amer. bor. — An diversa a *Cord. pistillariæformi* B. et Br. — Syll. II, p. 568.

6. *Cordyceps Voeltzkowii* P. Henn. in Voeltzkow, Reise Ostafrika 5059 III (1908) p. 29, taf. III, fig. 22. — Stromatibus solitariis, clavatis, rufo-brunneis, 4-9 cm. long.; clavulis oblongis obtusis, 1-2 cm. long., 3-10 mm. lat., stipite cylindraceo, cavo, c. 3-7,5 cm. long., 2-7 lato; peritheciis immersis, oblongo-ovoides, ostiolis punctoideis; ascis subfusioideo-cylindraceis, apice capitellatis rotundatis, 250-300 \times 4-7, tetrasporis; sporidiis parallelis filiformibus, pluriguttulatis, septatis, 1,5-2 μ . cr.; stromatibus conidiophoris in medio stipitis sparsis, ovoideis c. 1-1,5 mm. long., 0,5-1 mm. cr., hyphis septatis ramosis, 3-8 μ . cr. rufo-brunneolis; conidiis ellipsoideis v. ovoideis, hyalinis, 6-7 \times 2-3.

Hab. ad terram in silvis, Andranohinaly Madagascar. — *C. Volkianæ* A. Moll. affinis.

7. *Cordyceps coronilla* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5060 Abt. I (1909) pag. 306, cum icon. — Ochraceo-flava; mycelio discum membranaceum radiosum formante; stromate e medio disco oriundo, stipite brevi crasso 360 \times 220 prædito et in capitulum

hemisphærico-discoideum 1,5 mm. latum et 1 mm. cr. abeunte; peritheciis in quoque capitulo 18-20 verticaliter stipatis et immersis, conicis, 900 \times 300, papillatis; ascis . . . immaturis.

Hab. in parvo hymenoptero (ex Tenthredinideis) prope Ignape Brasilia merid. (WETTSTEIN et SCHIFFNER). — Videtur affinis *Cord. subdiscoideæ*.

8. *Cordyceps podocreoides* v. Höhnelt, Stzb. k. Ak. d. Wiss. Wien 5061 CXVIII (1909) p. 308, cum icon. — Stromatibus simplicibus raro furcatis, 4-5 cm. altis, basi radiciformibus, ochraceo-flavis, sursum leviter incrassatis, capitulo globoso-ovoideo 4-6 mm. cr. 4-7 mm. alto, ex ochraceo-brunneo ob perithecia verrucoso-punctato; peritheciis immersis ovoideis 400 \times 300, paraphysibus nullis; ascis cylindræis fragilibus octosporis apice hemisphærico-incrassatis, 400-450 \times 3-5; sporidiis parallelis filiformibus 1 μ . cr. in articulos octo bacillares secedentibus.

Hab. in larvis cujusdam Insecti majusculi dejecti in Horto bot. Buitenzorg insulæ Javæ. — *C. entomorrhizæ* et *C. Glaziovii* affinis.

9. *Cordyceps Klenei* Patouill., Bull. Soc. Mycol. Fr. XXIV (1908) 5062 p. 11, cum icon. — Mycelio aurantiaco, crusta membranacea, tenui fibrillisque repentibus, simplicibus ramosisve, larvæ corpus fere omnino obducente; stromatibus e crusta mycelii exeuntibus v. ad fibrillas erectas, graciles, ramulosas contortasque e crusta exurgentes, prope apicem insertis, lageniformibus, aurantiacis, erectis, substipitatis, apice sterili pallidiori, obtusis; peritheciis immersis, ostiolis prominulis, contentu brunneo, ovoideo-elongatis; ascis linearibus longissimis, 3-5 μ . cr., 8-sporis; sporidiis filiformibus.

Hab. in corpore larvæ *Nelei* sp. Brasilia (RICK).

10. *Cordyceps unilateralis* (Tul.) Sacc. — Syll. II, p. 570. — var. 5063 *javanica* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) pag. 305, tab. I. — Stromate filiformi curvulo nigricante 13-14 mm. basi 280 μ . diam. medio 180 apice 110; peritheciis ovoideis apice acutis 300 μ . alt.; ascis 220-250 \times 8, cylindricis apice capitulatis octosporis; sporidiis 200 \times 2,5-3 in articulos 6-8 μ . long. dilabentibus.

Hab. in Formicis in Batavia ins. Java (VAN ROZENBURG).

Fam. 9. Coryneliaceæ SACC.

CORYNELIA Achar. — Syll. II p. 813, IX p. 1073, XVI p. 650.

1. *Corynelia clavata* (L.) Sacc. — Syll. IX, p. 1073 — f. *macrospora* 5064 Syd., Deutsche Zentral-Afrika Exped. (1907-1908) II Bd. p. 99.

— A typo differt sporidiis majusculis, 10-17 \times 10-14.

Hab. in foliis vivis *Podocarpi milanjiani*, Ruwenzori-Africae trop.

2. *Corynelia oreophila* (Speg.) Starb., Ascom. Schwed. Chaco-Cordill. 5065 Exp., Arkiv f. Bot., Bd. V (1905) p. 20, fig. 13 a-c, *C. clavata* Auctt. p. p., *Alboffia oreophila* Speg., Fungi Arg. novi v. crit. pag. 295. — A *C. clavata* (L.) Sacc. em. dignoscitur peritheciis capitulis manifestim sulcis altiusculis tripartitis et est prædistincta species; ascis 38-50 \times 20-32 (p. sp.); sporidiis 10-15 μ . diam.; spermatii 5-12 \times 2,5-3.

Hab. in foliis vivis *Podocarpi* spec., inter Tarja et Gran Chaco, Bolivia. — *Coryn. clavata* (L.) Sacc. — Syll. XVI, p. 650 — *C. tropica* (Awd. et Rabh.) Starb., l. c. f. 14, *Endohormidium tropicum* Auswd. et Rbh., Hedwigia (1869) p. 89, *Trullula tropica* Sacc. — Syll. III, p. 732 — *Corynelia clavata* f. *andina* P. Henn. Hedw. 1897 p. 230. — Hæc sp. ascis 30 \times 16 (p. sp.), sporidiis 9-11,5 μ . diam. et præterea peritheciis cylindricis, sursum paullo angustioribus, vertice truncato-obtuso, undique gibberoso-verrucosis optime distinguitur, teste Starbäck l. c.

3. *Corynelia carpophila* Syd., Engler's Bot. Jahrbüch. 45 Bd. (1910) 5066 p. 264. — Stromate atro, pulvinato, fructus sæpe omnino obtegente; peritheciis lageniformibus, coriaceis, atris, in collum elongatum cylindricum usque ad 200 μ . cr. demum apice valde dilatatum (usque ad 400 μ .) integrum haud furcatum desinentibus; ascis variabilibus, mox cylindræis, mox saccatis, octosporis, apice obtusis, longe pedicellatis, p. sp. 18-28 \times 10-15; sporidiis monodistichis, primo hyalinis, dein fuscis, globosis, continuis, subtilissime verruculosi, 7-10,5 μ . diam.

Hab. in fructibus *Rapanea melanophilæ*, Haenertsberg Transvaal, Africa austr. (LANE POOLE).

Fam. 10. Microthyriaceæ Sacc. (*).*Subfam. 1. Microthyriæ.**Sect. 1. Hyalosporæ.*

MYIOCOPRON Speg. — Syll. II p. 659, IX p. 1053, XI p. 379, XIV p. 686, XVI p. 633, XVII p. 861.

1. **Myiocopron Euryæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 377. 5067
— Peritheciis primum immersis, minutis, nigro-carbonaceis, 0,3-0,4 mm. cr., 120-135 μ . altis convexis, inordinate positis v. circinatis in maculis hypophyllis flavo-virentibus, rotundatis 5-7 mm. diam. insidentibus; paraphysibus filiformibus mox diffluentibus; ascis cylindraceis, utrinque angustatis, apice rotundatis, 80-94 \times 16, octosporis; sporidiis unilocularibus, monostichis, ovoideis, hyalinis, levibus, 16 \times 6, rotundatis.

Hab. in foliis Euryæ acuminatæ, M. Gedeh in ins. Java.

2. **Myiocopron Verbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 5068 (1908) p. 130. — Subiculo nullo; peritheciis laxè gregariis, subcarbonaceis, dimidiato-scutatis, 75-100 μ . diam. stellatim dehiscen-
tibus; ascis obclavatulis superne tunica incrassata vestitis, 60-70 \times 25-30, octosporis, paraphysibus filiformibus apice subincrassatulis obvallatis; sporidiis oblique distichis, ellipsoideis, utrinque obtusis 26-28 \times 12-14, primo nubilosis, hyalinis, dein eguttulatis subchlorinis.

Hab. ad ramulos languidos vel emortuos Ilicis paraguayensis in dumetis circa San Pedro Argentinae Amer. austr.

3. **Myiocopron valdivianum** Speg., Fungi Chilenses (1910) pag. 103, 5069 cum icon. — Peritheciis epiphyllis laxè gregariis scutiformibus minutissimis, perforato-ostiolatis, margine denticulato-fimbriatis prosenchymatico-radiantibus, olivaceis, glabris subiculo destitutis, 75-90 μ . diam.; ascis subcylindraceis, aparaphysatis, breviuscule pedicellatis, 27-30 \times 5-6; sporidiis oblanceolatis pusillis, hyalinis, 8 \times 2.

Hab. ad folia viva Eugeniae cujusdam in silvis Bahia Corral Chile Amer. austr.

(*) Cfr. conspectum generum *Microthyriacearum* didymosporarum a prof. v. Höhnelt propositum in *Fragm. zur Mykol.* X, p. 14 (1910).

4. *Myiocopron argentinense* Spegazz., An. Mus. Nac. Buenos Aires 5070 t. XIX (1909) p. 423. — Maculis nullis; peritheciis sparsis arcte matrici adnatis, orbicularibus, 120 μ . diam., astomis opacis margine non fimbriatis; ascis fusoideis, 50 \times 9-10, octosporis, aparaphysatis; sporidiis elongato-ellipsoideis, subnavicularibus, oblique distichis utrinque subobtusis, 14-15 \times 3-3,5, hyalinis, non v. grosse 1-2-guttulatis.

Hab. ad caules dejectos arescentesque Fœniculi piperiti, Santa Catalina, prope Buenos Aires, Argentina, Amer. austr.

COSCINOPELTIS Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 425 (Etym. *coscinon* cribrum et *pelte* scutum). — Stromata orbicularia dimidiato-scutiformia, superne laxè punctulato-ostiolata, inferne reticulato-loculigera; asci octospori; sporidia 1-locularia brevia, hyalina. — Est *Polystomella* amerospora et hyalospora.

1. *Coscinopeltis argentinensis* Speg., l. c. p. 425, cum icon. — Stro- 5071 matibus arcte matrici adnatis 1-5 mm. diam. nigris non vel vix nitidulis; ascis ellipsoideo-obovatis apice rotundato-subtruncatis crassissimeque tunicatis, basi abrupte cuneatis, brevissime noduloseque pedicellatis 50-60 \times 12-20, octosporis, paraphysatis; sporidiis distichis v. conglobatis, navicularibus, 12-14 \times 6-7, hyalinis.

Hab. ad folia viva Heteropteridis cujusdam in silva Bo- badal, Argentina Amer. austr.

Sect. 2. Phæosporæ.

VIZELLA Sacc. — Syll. II p. 662, IX, p. 1054, XVII p. 861.

1. *Vizella Urvilleana* Speg., An. Mus. Nac. Buenos Aires t. XIX 5072 (1909) p. 424, cum icon. — Peritheciis sparsis coriacellis ostiolatis margine integerrimis, 200-250 μ . diam.; ascis cylindraceutis basi cuneatis breviter crasseque pedicellatis, 80-90 \times 18-20, octosporis, paraphysatis; sporidiis distichis utrinque rotundatis ellipsoideo-navicularibus, 18-20 \times 8-10, non v. minute 2-guttulatis, primo hyalinis dein fuligineis.

Hab. ad folia arida Panici Urvilleani, Juarez Celman, prope Cordoba, Argentina Amer. austr.

Sect. 3. Hyalodidymæ.

MICROTHYRIUM Desm. — Syll. II p. 662, IX p. 1055, XI p. 379, XIV p. 687, XVI p. 635, XVII p. 862.

1. *Microthyrium aberrans* Speg., Fungi Chilenses (1910) pag. 106, 5073 cum icon. — Peritheciis hypophyllis sparsis v. perlaxe gregariis, superficialibus dimidiato-scutatis, astomis, atris, glabris, prosenchymaticis, ambitu areola angustissima subciligera cinctis, 100-180 μ . diam.; ascis ovatis v. obovatis, apice tunica crassissima umbo-niformi donatis, aparaphysatis, octosporis, 20-25 \times 12-15; sporidiis 3-4-stichis, hyalinis e cylindraceo oblanceolatis, 1-septatis, parvis, 10-11 \times 3.

Hab. in foliis siccis non dejectis Lardizabalæ biternatæ in silvis prope Cerro Caracol de Concepcion Chile Amer. austr. — An cum *Asterina labecula* Mont. comparanda?

2. *Microthyrium patagonicum* Spegazz., An. Mus. Nac. Buenos Aires 5074 t. XIX (1909) p. 426. — Peritheciis sæpius hypophyllis, sparsis v. laxè gregariis orbicularibus 100-150 μ . diam., planiusculis, astomis, margine denticulatis obsolete fimbriato-radiantibus; ascis subcylindraceis basi breviter crasseque attenuato-pedicellatis, 40-45 \times 10, octosporis, aparaphysatis; sporidiis distichis rectis vel leniter curvulis, 15-16 \times 2,5-3, loculis æquilongis eguttulatis, infero graciliore, hyalinis.

Hab. ad folia viva Mayteni magellanica prope Lago Palomo, Patagonia, Argentina America austr. — *Micr. punctiformi* (B. et C.) Sacc. cognatum.

3. *Microthyrium eucalypticola* Speg., An. Mus. Nac. Buenos Aires 5075 t. XIX (1909) pag. 426. — Peritheciis plus minusve densiuscule gregariis orbicularibus 150 μ . diam., minute ostiolatis, margine vix denticulatis, membranaceo-coriaceis, opacis; ascis obclavatis, apice subtruncato-rotundatis, basi abrupte cuneatis brevissime umbonato-pedicellatis, 30-40 \times 8-9, octosporis, aparaphysatis; sporidiis ellipsoideo-elongatis 1-septatis ad septum non constrictis, 12-14 \times 3, loculis æqualibus non v. minute 2-guttulatis, hyalinis.

Hab. ad folia dejecta subputrescentia Eucalypti globuli in Parque La Plata, Argentina America austr. — *M. microscopico* Desm. paraffine.

4. *Microthyrium confertum* Theiss., Ann. Mycol. VII (1909) p. 352. 5076 — Mycelio aereo nullo; peritheciis epiphyllis, applanato-scutellatis,

dense confertis, totam foliorum superficiem æqualiter denseque atro-punctantibus, 150-200 μ . diam., poro pertuso, textura radiata, cellulis perbrevibus, cylindræo-rhomboideis; ascis tereti-clavatis, fere sessilibus, c. 42-55 \times 16-18 v. etiam elongatioribus, medio ventriculosis usque ad 65 \times 15, 8-sporis; sporidiis exacte ovatis, hyalinis, ad septum non v. vix constrictis, 12-15,5 \times 8,5-11, loculo supero (majore v. æquali v. minore) late rotundato, infero subconice angustato.

Hab. in foliis vivis Myrrhinii rubriflori in silva, Sao Leopoldo, Rio Grande do Sul Brasilia.

5. *Microthyrium applanatum* Rehm, Ascom. Exsicc. fasc. 41, n. 1774, 5077
Ann. Mycol. VI (1908) p. 122. — Peritheciis epiphyllis, gregariis, in folio haud decolorato sessilibus, dimidiatis, applanatis, poro perspicuo pertusis, distincte orbicularibus, hyphis radiantibus mollibus, tenuissime pseudoparenchymatice fuscidule contextis, glabris, nigritulis, 0,3-1 mm. diam.; ascis ovoideis, 30-35 \times 20, octosporis; sporidiis clavatis, utrinque obtusis, medio septatis, paullulum constrictis, hyalinis, 15 \times 6, distichis; paraphysibus nullis.

Hab. ad folia viva Myrtaceæ, Sao Leopoldo Rio Grande do Sul Brasiliæ (Rick).

6. *Microthyrium malacoderma* (v. Höhn.) Sacc. et Trott. *Microthy-* 5078
riella malacoderma v. Höhn. Fragm. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1173. — Peritheciis hypophyllis, mollibus, depressis, semiscutatis, sparsis, rotundatis, usque ad 1 mm. diam., 70-100 μ . cr., griseo-brunneolis, albido-griseis, ob drusas crystallinas pulveraceis, medio obscurioribus levibusque, margine pallidioribus tenuiter circumscriptis, astomis; contextu tenuiter membranaceo; parenchymatico, ad marginem tenuiori fibrilloso, maturo irregulariter in areolas fisso; stratu basilarum tenui minute subplectenchymatico, hyalino; paraphysibus numerosissimis, atypicis, ramosis, plectenchymatico-floccosis, mucosis; ascis ovoideo-ellipsoideis, sessilibus, tunica uniformiter 5-6 μ . in-crassata (immatura usque ad 16 μ .), octosporis, 120-140 \times 80-85; sporidiis subparallelis, hyalinis, regulariter obtuse granulosis, contentu sordide pallide brunneolo, bilocularibus, rectis v. plerumque curvulis, cylindræis apice obtusis, septo non constrictis, 85-100 \times 18-24. J -.

Hab. in foliis Paratropiæ sp. in silvis Tjibodas in ins. Java.

— *Mic. Rickii* (Rehm) v. Höhn. affine.

7. *Microthyrium microscopicum* Desm. — Syll. II, pag. 662 — var. 5079

majus Speg., *Fungi Chilenses* (1910) p. 105. — Peritheciis 100-150 μ . diam., coriaceis, ostiolo angusto 10 μ . lato; ascis 45 \times 8-9, aparaphysatis; sporidiis 12-14 \times 4-5.

Hab. in foliis dejectis siccis *Perseæ Lingue* in silvis Cerro Caracol de Concepcion, Chile, Amer. austr. — Var. *minus* Speg., l. c. — Differt a precedente peritheciis 110 μ . diam., subdiaphanis, ostiolo 20 μ . diam. præditis; ascis 35-40 \times 8, paraphysatis; sporidiis 10-11 \times 4. — In iisdem foliis prope Ciudad de Valdivia Chile Amer. austr.

8. *Microthyrium ?astomum* Speg., *Fungi Chilenses* (1910) pag. 104, 5080 cum icon. — Peritheciis hypophyllis subsparsis dimidiato-lenticularibus, pusillis, astomis glabris nigris subiculo destitutis, 50-60 μ . diam.; ascis paucis ovatis, percrasse brevissimeque pedicellatis, aparaphysatis, 30 \times 14; sporidiis oblanceolatis, hyalinis, parvis, 1-septatis non v. vix constrictis, 10 \times 3.

Hab. in foliis dejectis *Cryptocaryæ Peumi*, in silvis Cerro Caracol de Concepcion Chile Amer. austr.

9. *Microthyrium disjunctum* Rehm, *Ascom. Exsicc. fasc. 41, n. 1775*, 5081 *Ann. Mycol. VI* (1908) p. 123. — Peritheciis in maculis orbicularibus epiphyllis, dilute nigritulis, interdum confluentibus, 4-7 mm. lat., plurimis gregariis, sessilibus, atris, dimidiatis, semiglobosis, poro pertusis, 120-150 μ . diam., haud confluentibus, prosenchymatice ex hyphis fusco-flavidulis, centrifugis contextis, ad marginem radiantibus in hyphas mycelii tenuissime flavidulas, 2-3 μ . cr., interdum rectangulariter ramosas et 2-3 parallele conglutinat, ansas magnas componentes abeuntibus, hyphopodiis carentibus; ascis clavatis, sessilibus, 45-48 \times 10-12, octosporis; sporidiis clavatis, supra medium septatis, cellula superiore plerumque rotundata, inferiore acutata, haud constrictis, hyalinis, 10-12 \times 4,5-5, distichis; paraphysibus subramosis.

Hab. ad folia viva *Solani*, Sao Leopoldo Rio Grande do Sul Brasilæ (Rick). — Ab *M. confluenta* Pat. mycelio validiori, peritheciis confluentibus diversum.

10. *Microthyrium crassum* Rehm in Theiss., *Ann. Mycol.* (1910) 5082 p. 463. — Peritheciis gregariis, plerumque epiphyllis, crassiuscule orbicularibus subconice cupulato-elevatis, concentrice zonatis, atris, basim versus brunneolis, glabris, opacis, contextu radiato, ambitu determinato non fimbriato, 0,5-0,8 mm. diam., sæpius confluentibus, maculas flavescentes in folio efficientibus, arcte adhærentibus; ascis cylindraceis v. elongato-saccatis, breviter pedicellatis, superne

rotundatis, tunica crassa mucosa, abundanter paraphysatis, 8-sporis, 55-65 \times 15, cylindræis usque ad 75 \times 10-12; paraphysibus tenuibus ascos superantibus, apice paullo incrassatis; sporidiis distichis, hyalino-viridulis, 1-septatis, non constrictis, oblongis, rotundatis, cellulis fere æqualibus, superiore paullo crassiore, 14-16 \times 5.

Hab. in foliis vivis Solani boerhaviifolii in silvis, Sao Paulo, Rio Grande do Sul, sociis *Asterina vagante*, *Micropeltide vagabunda* et *Meliola glabra*.

11. *Microthyrium Laurenti* P. Henn., Mission E. Laurent fasc. III 5088 (1906) pag. 317. — Peritheciis amphigenis sparsis, minutis, dimidiato-orbicularibus, atris, hyphis radiantibus fusco-olivaceis, 130-160 μ . cinctis, centro pertusis; ascis clavatis, apice rotundato-obtusis, tunicatis, octosporis, 25-35 \times 8-11; paraphysibus ramosis filiformibus hyalinis, 1 μ . cr.; sporidiis subdistichis oblongo-ellipsoideis v. subclavatis, curvulis, medio 1-septatis, guttulatis, hyalino-cyanescentibus, 10-14 \times 3,5-4,5.

Hab. in foliis Coffeæ sp. Ubangi, Congo, Africa. — St. pycnid.: *Leptothyrium Laurenti* P. Henn., sporulis innumeris, fusoides, utrinque acutis hyalinis, 3-4 \times 0,5-0,7. — A *Microth. Coffeæ* omnino distinctum.

12. *Microthyrium leopoldvilleanum* P. Henn., Mission E. Laurent 5084 fasc. III (1906) pag. 317. — Peritheciis epiphyllis, sparsis, dimidiato-orbicularibus, atris, 250-300 μ . diam., marginatis, contextu atro-ærugineo, radiato-celluloso; ascis clavatis, vertice crasse tunicatis, rotundatis, octosporis, paraphysatis, 80-90 \times 25-30; sporidiis subdistichis, oblongis, subclavatis, hyalinis, medio 1-septatis, 28-30 \times 10-12.

Hab. in foliis vivis Coffeæ sp. Leopoldville, Congo, Africa. — *Micr. Coffeæ* affiné sed peritheciis, ascis sporidiisque satis diversum.

13. *Microthyrium rimulosum* Spegazz., An. Mus. Nac. Buenos Aires 5085 t. XIX (1909) p. 426. — Maculis pallescentibus diffusis; peritheciis laxissime gregariis pusillis, orbicularibus, 120 μ . diam., æstomis sed centro reticulato-rimulosis, margine integerrimis, subcoriacellis non nitentibus; ascis ovoides sessilibus, apice crassissime tunicatis basi vix papillato-pedicellatis, 25-30 \times 15-18, octosporis, paraphysatis; sporidiis elongato-obovatis, 1-septato-constrictulis, 10 \times 3-4, hyalinis.

Hab. ad ramulos vivos Sapii salicifolii culti in Santa Catalina prope Buenos Aires, Argentina America austr.

14. *Microthyrium mebelense* P. Henn., in Fl. du Bas- et Moy.-Congo, 5086
in Ann. Mus. du Congo v. II, fasc. III (1908) p. 227. — Peritheciis epiphyllis gregarie sparsis, dimidiato-scutellatis, atris c. 1 mm. diam., contextu cellulosi olivaceo-fuscis; ascis ovoideis vertice crasse tunicatis, 8-sporis, aparaphysatis; sporidiis conglobatis longe fusoides utrinque obtuso-rotundatis, medio 1-septatis haud constrictis, subinaequilateralibus, hyalinis, 30-40 \times 8-10.

Hab. in foliis indeterminatis, Mbela Congo, Afr. trop. (VANDERYST).

15. *Microthyrium Phegopteridis* P. Magn., Abh. naturh. Ges. Nürnberg. 5087
XVI (1906) p. 74. — Scutellis e rotundato ovoideis, superficialibus, nigris, depressis, 78,45 \times 104,6, v. 83,68 \times 146,64, v. 104,69 \times 141,41, peripherice pseudoparenchymatice subradiantibus; peritheciis solitarie sparsis non crustiformi confluentibus; ascis sporidiisque ignotis.

Hab. in foliis et petiolis *Phegopteridis Dryopteridis*, prope Feucht Franconia (ZAHN). — A. M. *litigioso* peritheciis non confluentibus et cellulis pseudoparenchymaticis minoribus distinctum. Species, ignota fructificatione, omnino dubia.

CLYPEOLUM Speg. — Syll. II p. 667. IX p. 1061, XI p. 380, XIV p. 688, XVI p. 637.

1. *Clypeolum vulgare* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 384. 5088
— Peritheciis gregariis, depressis, rotundatis, nigris, astomis, sed demum scutellato-erumpentibus 0,5-0,7 mm. diam.; hyphis aëreis nullis; ascis globosis v. breviter ovoideis, 17-21 μ . diam., crasse tunicatis, octosporis; paraphysibus nullis; sporidiis ovoideis v. subclavatis, bilocularibus, levibus, hyalinis, 9-12 \times 3-4.

Hab. epiphytice ad folia arborum variarum: *Hydnocarpus*, *Garcinia*, *Canarium*, *Tjampea*, *Payena*, *Depok*, *Buitenzorg* in ins. Java.

2. *Clypeolum quercinum* (Schulz.) Sacc. et Trav. — Syll. XIX, p. 360 5089
— *Thyriascus quercinus* Schulz. in Flora (1877) p. 51, t. II, f. 3.
— Peritheciis scutiformibus, firmis, corneis, puncti magnitudine, nempe 250-330 μ . diam., nigris, adultis a matrice secedentibus; ascis erectis, sessilibus, obovato-vesiculiformibus, octosporis; sporidiis irregulariter stipatis, bilocularibus, loculo superiore subgloboso, infero tenuiore subconoideo, hyalinis, 19 \times 10.

Hab. in ramis corticatis *Quercus Roboris*, prope Eperies Hungariæ, socia *Clithri quercina*.

CHÆTOTHYRIUM Speg. — Syll. IX p. 1061, XVI p. 636.

1. *Chætothyrium punctiforme* Rick, Broteria V (1906) pag. 40. — 5090
 Mycelio aëreo nullo; peritheciis hypophyllis, superficialibus, gregariis, punctiformibus, 40-50 μ . diam., radiantibus, setulis repentibus, conspersis; setulis 2-3 μ . latis, ferrugineo-brunneis, vix ramosis, septatis, undulatis, usque ad $\frac{1}{4}$ mm. longis, aliquoties fasciculatis; ascis ovalibus v. oblongis, vix 30-40 \times 10, octosporis; sporidiis cylindraceis v. oblongis, uniseptatis, in septo vix constrictis, 10-15 \times 3-5, hyalinis, parte inferiore angustiore.

Hab. in foliis vivis *Myrsines* sp. Rio Grande do Sul Brasiliæ.

TRICHTHOTHYRIUM Speg. — Syll. IX p. 1062.

1. *Trichothyrium densum* Raciborski, Bull. Ac. Sc. Cracovie (1909) 5091
 p. 380. — Plagulis amphigenis rotundatis, nigris, 0,3-0,8 cm. latis; cellulis hypharum cylindraceis 18-22 \times 8; hyphopodiis bilocularibus ovoideis 22-28 \times 10-13; peritheciis rotundatis, 100-150 μ . diam., ostiolo rotundato 16-18 μ . diam. præditis; ascis octosporis 30-40 \times 14-16; sporidiis hyalinis 14-17 μ . long. clavulatis, primum bi- dein trilocularibus, 3,5-4 μ . cr.

Hab. in foliis *Stechelocarpi Barahoh*, Depok prope Buitenzorg Java.

2. *Trichothyrium jungermannioides* Raciborski, Bull. Ac. Sc. Cracovie 5092
 (1909) pag. 379. — Plagulis amphigenis rotundatis 1-2 mm. cm. diam., laxe dendriticis ex hyphis cellulis cylindraceis 26-34 \times 8-13 formatis et lateraliter hyphopodia bicellularia apice obtusa 38 \times 18 gerentibus constitutis; thallo 100 μ . lato lobato lobis apice rotundatis; peritheciis ad marginem thalli numerosis, junioribus subreniformibus, maturis rotundato-depressis, nigris, usque ad 100 μ . diam. margine in hyphas desinentibus; paraphysibus nullis; ascis clavato-ovoideis, 37 \times 16-18, octosporis; sporidiis ovoideis, 12 \times 3-4, medio transverse uniseptatis, hyalinis, levibus.

Hab. in foliis *Connari* sp., Depok in ins. Java.

3. *Trichothyrium chilense* Speg., Fungi Chilenses (1910) p. 106, cum 5093
 icon. — Vittis subiculi alternatim ramosis tenuibus, 5-15 mm. long., 80-200 μ . diam., nigris superficialibus, pinnatim prosenchymaticis, sæpius epiphyllis; peritheciis dimidiato-septatis, pusillis, 75-80 μ . diam., ostiolo 15 μ . diam. præditis, laxe vittis insidentibus; ascis obovatis brevissime crasseque pedicellatis, 30 \times 14, paraphysatis, octosporis; sporidiis 3-stichis oblanceolato-biconoideis, hyalinis, parvis 10 \times 4, uniseptatis, constrictis.

Hab. in foliis *Eugeniæ* sp. in silvis Bahia de Corral Chile Amer. austr.

POLYSTOMELLA Speg. — Syll. IX p. 1063, XVI p. 639, XVII p. 865.

1. *Polystomella nervisequia* v. Höhn. *Fragm. Mykol.* VII (1909) in 5094 Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 850. — Stromatibus superficialibus, opace nigris, rugulosis, minute granulosis, irregulariter noduloso-elongatis, usque ad 700 μ . long., 500 μ . alt., coriaceo-carbonaceis, facile secedentibus, plerumque in maculis hypophyllis indeterminatis seriatim insidentibus; contextu stromatico parenchymatico; loculis rotundato-ovoideis, 100-120 \approx 50-100, immersis, approximatis, perpendiculariter dispositis, apice ostiolo rotundato 45 μ . lato apertis; ascis clavatis, supra rotundatis ibique tunica usque ad 5 μ . incrassata præditis, basi in pedicellum brevem crassum attenuatis; octosporis, 60-78 \approx 13-14; paraphysibus genuinis nullis; sporidiis hyalinis di- v. tristichis, elongato-cylindraceis, utrinque rotundatis, uniseptatis, 16-22 \approx 4-5.

Hab. in foliis *Berliniæ* sp., Usambara or. Africae (ZIMMERMANN). — Cl. v. Höhn. l. c. contendit hoc genus cum *Microcyclo* Sacc. et Syd. collidere et tunc *Dothideaceas* spectare, quod hucque non satis probatum videtur.

Sect. 3. Phæodidymæ.

SEYNESIA Sacc. — Syll. II p. 668, IX p. 1064, XI p. 381, XIV p. 689, XVI p. 639, XVII p. 865.

1. *Seynesia elegantula* Syd., Engler's Bot. Jahrbüch. 45. Bd. (1910) 5095 p. 263. — Peritheciis amphigenis, præcipue epiphyllis, dimidiato-scutatis, 400-600 μ . diam., atris, irregulariter dehiscentibus, rugulosis, ambitu in hyphas radiantes fuscas septatas simplices vel ad apices versus dichotome ramosas longissimas usque 1 mm. longas et 6-7,5 μ . numerosas amœne abeuntibus; mycelio proprio parco v. subnullo; ascis clavatis, apice rotundatis, valde incrassatis, breviter stipitatis, 60-85 \approx 20-28, octosporis; sporidiis distichis, oblongatis, medio constrictis, utrinque rotundatis, primo hyalinis, dein brunneis, 25-32 \approx 9-11, loculo inferiore plerumque leniter angustiore; paraphysibus filiformibus.

Hab. in foliis *Xymali* spec., Lamuru Massai Africae trop.

(SCHEFFLER).

2. *Seynesia Heteropteridis* Theiss., Broteria (1910) p. 9. — Peritheciis dimidiatis, mycelio laxo insidentibus v. etiam densius ab eo involutis, orbicularibus, radiatis, maculas atras tenues 1-3 mm. latas efformantibus; hyphis 7-8 μ . cr., hinc inde nodulosis, hyphopodiis destitutis; ascis ovoideis v. urceolatis, 60-65 \times 35-45, sessilibus; sporidiis brunneis, 1-septatis, constrictis, oculis subæqualibus, rotundatis, 24-28 \times 14-17.

Hab. epiphylla in foliis vivis *Heteropteridis*, Sao Leopoldo Brasiliæ.

3. *Seynesia ilicina* Syd., Ann. Mycol. VII (1909) pag. 170. — Peritheciis dimidiatis, mycelio laxo insidentibus v. etiam densius ab eo involutis, orbicularibus, radiatis, maculas atras tenues 1-3 mm. latas efformantibus; hyphis 7-8 μ . cr., hinc inde nodulosis, hyphopodiis destitutis; ascis ovoideis v. urceolatis, 60-65 \times 35-45, sessilibus; sporidiis brunneis, 1-septatis, constrictis, oculis subæqualibus, rotundatis, 24-28 \times 14-17. 5096

Hab. in foliis *Ilicis* integræ, Komaba-Tokyo, Japonia.

4. *Seynesia Licania* Rehm, Ann. Mycol. VII (1909) p. 538. — Maculis epiphyllis fusciculis, suborbicularibus, tenuissime arachnoideis, 3-5 mm. diam.; peritheciis dimidiatis, poro pertusis, nigris, glabris, prosenchymatice radiatim contextis, usque ad marginem perithecii, fuscis 250 μ . diam., gregarie sessilibus, in hyphis longis rectis fuscis, 5-6 μ . cr., septatis, rectangulariter ramosis sitis; hyphopodiis carentibus; ascis ovalibus, 30-33 \times 20, 8-sporis; sporidiis oblongo-cuneatis, inæqualiter 2-cellularibus, 15-17 \times 6-7, cellula superiore demum subglobosa, c. 6 μ . longa, primitus hyalinis, demum fusciculis; paraphysibus conglutinatis. 5098

Hab. ad folia *Licania*, prope Pará Brasiliæ (C. F. BAKER).

— *Seynesia Schroeteri* Rehm, sporidiis multo minoribus diversa.

5. *Seynesia chilensis* Speg., Fungi Chilenses (1910) p. 107, cum icon. — Peritheciis hypophyllis sparsis, maculis subeulocis plane destitutis, superficialibus, dimidiato-scutatis, astomis, coriacellis, margine crenulatis, 250-400 μ . diam.; ascis mox diffluentibus; sporidiis elliptico-obovoides mediocribus, 1-septato-constrictulis, fuliginosis, 25-28 \times 12-14. 5099

Hab. in foliis vivis *Eugenia* sp. in silvis Bahia de Corral

Chile Amer. austr. — Sec. Spegazzini l. c. p. 108 ad hoc genus spectat etiam *Lembosia Drymidis* (Lév.) Mont.

6. *Seynesia montana* (Racib.) Sacc. et Trott., *Trichopeltis montana* 5100 Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 378. — Peritheciis epiphyllis sub thallo inordinate nidulantibus tectis, subgloboso-depressis, 170-200 μ . diam. ostiolo minuto rotundato apicali præditis; thallo anguloso unistratoso e cellulis 5-10 \times 2,5-5 brunneonigris constituto, ad marginem longe lacinulato; ascis clavato-cylindræis, rectis v. curvulis, 36-50 \times 8-10, octosporis; sporidiis bilocularibus, levibus, longe ovoideis, 11-14 \times 3-4, pallide brunneis.
- Hab.* in foliis *Vaccinii Teysmanniani* in M. Gedeh et Pangerango in ins. Java. — Ob sporidia bilocularia brunnea potius *Seynesiæ* quam *Trichopelti* proxima.

7. *Seynesia scutellum* Syd. Ann. Mycol. VIII (1910) p. 40. — Pe- 5101 ritheciis epiphyllis, maculiformiter aggregatis v. sine ordine distributis, sed maculis propriis nullis, orbicularibus, dimidiato-scutellatis, superficialibus, facile a folio secedentibus, 350-550 μ . diam., microthyrioideo-contextis, ambitu amœne fimbriatis, poro 12-18 μ . lato pertusis; ascis clavatis, subsessilibus, 50-70 \times 14-20, octosporis, aparaphysatis; sporidiis ellipsoideo-oblongis, utrinque obtusis, medio septatis vix constrictis, primo hyalinis, dein fuscis, 22-28 \times 7-10.

Hab. in foliis *Drimydis piperitæ*, Pauai 2100 m. alt. in provincia Benguet, Luzon, ins. Philipp. (R. C. Mc GREGOR).

8. *Seynesia brasiliensis* Spegazz., Fungi Paulist., Rev. Mus. La Plata 5102 t. XV, p. 29. — Subiculo epiphylllo quandoque vix evoluto arachnoideo quandoque membranaceo arcte matrici adhærente, plagulas suborbiculares 2-5 mm. diam. sæpe confluentes efformans, hyphis reticulato-intertexis septulatis 5-6 μ . cr., constituto; peritheciis laxè gregariis vix convexulis 250 μ . diam., ostiolo majusculo 25-30 μ . diam. pertusis, coriacellis opacis, contextu indistincto ambitu vix crenulato-fimbriato; ascis antice subtruncato-rotundatis crasseque tunicatis postice cuneatis breviter crasseque stipitatis, 80-100 \times 20-25, paraphysibus filiformibus vix longioribus densiuscule obvallatis; sporidiis oblique distichis uniseptatis, medio validiuscule constrictis, 24-25 \times 12, oculis subæquilongis, supero ovato obtusiore, infero subconoideo acutiore, diu hyalinis, postremo fuliginosis.

Hab. ad folia coriacea arboris ignotæ cujusdam, Ipiranga atè Cambucy Brasilia (USTERI).

Sect. 2. Hyalophragmiæ.

MICROPELTIS Mont. — Syll. II p. 669, IX p. 1069, XI p. 381, XIV p. 690, XVI p. 642, XVII p. 868.

1. **Micropeltis Wettsteinii** v. Höhnelt, *Ergeb. Bot. Exp. Südbres.* 1901, 5103
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 17.
— Peritheciis gregariis, non maculiculis, circinantibus, scutatis, margine denticulatis, nigris vel nigro-brunneis, nitidulis, opacis, carbonaceis, ostiolo 5-6 μ . lato, tenui-marginato, 400-500 μ . diam.; ascis numerosis, clavatis, supra rotundatis, basi in pedicellum tenuem nodoso-attenuatis, plerumque 40-48 \times 4-5, paraphysibus filiformibus simplicibus v. ramosis, 1-1,5 μ . cr. obsitis, octosporis; sporidiis plerumque distichis, hyalinis, elongato fuscoideis, utrinque acutatis, bilocularibus, demum quadrilocularibus, 9-10 \times 2,5-3.

Hab. in pagina sup. foliorum *Anemones Wettsteinii*, M. Itatiaya 1400-2000 m. alt. Brasilia.

2. **Micropeltis clavigera** Saccardo, *Fungi aliquot africani*, Bol. Soc. 5104
Broteriana v. XXI (1904-1905) p. 6. — Peritheciis epiphyllis laxe et late gregariis dimidiatis, omnino planis, ambitu circularibus 400-500 μ . diam., facillime secedentibus, opace nigris, ostiolo centrali impresso 35-40 μ . diam., pertusis, contextu minute celluloso non radiante, fuligineo-cyanescente, cellulis 4-5 μ . diam., margine tenuiter fimbriato, subreticulato; ascis oblongo-clavatis, breviter tenuato-substipitatis, apice obtusis, 150 \times 40, paraphysibus dense stipatis, hyalinis, copiosissimis, 1-1,5 μ . cr. obvallatis, octosporis; sporidiis cylindraneo-clavatis, tristichis, deorsum sensim notabiliter tenuatis, apice rotundatis, 72 \times 14-15, constanter 4-septatis, ad septa leviter constrictis, strato mucoso tenuissimo obvolutis.

Hab. in foliis languidis *Grewiæ coriaceæ* et *Hunteriæ* ambientis in Camaroes Africae occid. (Communic. A. MOLLER).

3. **Micropeltis Heteropteridis** Theiss., *Ann. Mycol.* VII (1909) p. 352. 5105
— Peritheciis epiphyllis, raris, sparsis, punctiformibus, subpulvinato-scutellatis, orbicularibus, atris, vix annulo minutissimo decolorato in folio circumdati, poro pertuso, textura radiata, margine fimbriatis; ascis ovatis v. clavato-ventricosis, 8-sporis, c. 50-65 \times 28-35; sporidiis hyalinis oblongis, rectis, oblique monostichis, subdistichis, utrinque rotundatis, 3-6-septatis, ad septa vix constrictis, 22-28 \times 7,5-9.

Hab. in foliis vivis *Heteropteridis* sp. in silvula (*capao*),
 Sac Leopoldo Rio Grande do Sul, Brasilia.

4. *Micropeltis corynespora* Saccardo, Fungi aliquot africani, Bol. Soc. 5106
 Broteriana v. XXI (1904-1905) pag. 6. — Peritheciis epiphyllis,
 sparsis, dimidiatis, plano-convexulis, ambitu circularibus, 600-800
 μ . diam., facile secedentibus, opace nigris, ostiolo centrali impresso
 28 μ . diam., pertusis; contextu minute celluloso, non radiato, fu-
 ligineo, ambitu fere integro, subcyanescenti; ascis clavatis, breviter
 tenuato-stipitatis, 110-120 \times 18-22, octosporis, paraphysatis, apice
 rotundatis; sporidiis subdistichis, clavatis, deorsum sensim notabi-
 liter tenuatis, typice 6-septatis, constrictis, 55-60 \times 8, hyalinis.

Hab. in foliis languidis *Paxiæ calophyllæ* ex Connaraceis
 in Camaroes Africae occid. (Communic. A. MOLLER). — A *Micro-*
peltide ceruginosa differt sporidiis distincte clavatis, 6-septatis, cel-
 lulis mediis non crassioribus, peritheciis poro subrotundo pertusis,
 etc.; a *M. clavigera* mox dignoscitur sporidiis 6-septatis multo
 minoribus, etc.

5. *Micropeltis albo-ostiolata* P. Henn., Hedwigia XLVII (1908) p. 268. 5107
 — Peritheciis hypophyllis sparsis, dimidiato-scutellatis, atro-cel-
 lulosi, ostioliis pertusis albis, ca. 200-220 μ . diam., hyphis fuscis
 2-4 μ . cr., conidiis clavatis, fuscis 3-4-septatis, 40-50 \times 3-4; ascis
 oblongo-ovoideis v. ellipsoideis, 8-sporis, 25-35 \times 10-13, paraphy-
 sibus filiformibus, hyalinis, 0,5-1 μ . crassis; sporidiis subdistichis v.
 conglobatis, clavatis, 3-septatis, constrictis, grosse guttulatis, 10-
 13 \times 3-4.

Hab. in foliis Myrtaceæ, Amazonas, Rio-Juruá, Brasilia.

6. *Micropeltis Hirtellæ* P. Henn. Hedwigia XLVII (1908) p. 269. — 5108
 Peritheciis gregarie sparsis hypophyllis, dimidiato-scutellatis, atro-
 brunneis, reticulato-cellulosis, ostiolatis, margine fibroso-pallidis ca.
 200-280 μ . diam.; ascis clavatis, rotundatis, curvulis, 8-sporis, 35-
 45 \times 13-18; sporidiis subdistichis v. conglobatis, subclavatis v. sub-
 fusoides utrinque obtuso-rotundatis, 5-7-septatis, constrictis, hya-
 linis, 30-35 \times 5.

Hab. in foliis *Hirtellæ amazonicæ* Aubl., Amazonas, Rio
 Juruá, Brasilia.

7. *Micropeltis Cauna* Speg., An. Mus. Nac. Buenos Aires t. XIX 5109
 (1909) p. 428. — Maculis nullis; peritheciis sparsis minutis non
 nitentibus, amphigenis, solitariis, orbicularibus 150-200 μ . diam.,
 stellatim dehiscentibus, ambitu integris, areola tenuissima hyalina
 cinctis; ascis obclavatis tetrasporis, apice crasse tunicatis, basi bre-

vissime noduloseque pedicellatis, 70 \times 18-20, apapophysatis; sporidiis mediocribus clavulatis, 4-septatis 28-30 \times 6,5-7.

Hab. ad folia viva Pruni sphærocarpæ prope San Pedro, Misiones, Argentina America austr. — An *M. albo-marginatæ* Speg. tantum varietas?

8. *Micropeltis Reehingeri* v. Höhnelt, *Fragm. z. Mykol., Sitzb. k. Ak.* 5110 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 102. — Peritheciis epiphyllis, sparsis, opace brunneo-nigris, depresso-scutellatis ostiolo primum rotundato dein stellato præditis, breviter tenuiterque hyalino-marginatis, 280-300 μ . diam.; paraphysibus numerosis, filiformibus, mucosis; ascis octosporis, clavatis, sessilibus 32-44 \times 10-11; sporidiis distichis v. tristichis, hyalinis, quadrilocularibus, non constrictis, elongatis v. elongato-clavatis, utrinque tenuiter rotundatis, 13-18 \times 3-4.

Hab. in foliis ? *Spiræanthemi*, Utumapu Samoa (RECHINGER). — *M. leucoptera* Penz. et Sacc et *M. albo-marginatæ* Speg. affinis sed distincta.

9. *Micropeltis biseptata* v. Höhnelt, *Fragm. Mykol. VIII* (1909) in 5111 *Sitzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I*, p. 1168. — Peritheciis hypophyllis, sparsis, superficialibus, depresso scutatis, nigris, membranaceis, 120-140 μ . latis, ostiolo rotundato 15-20 μ . lato præditis, zonula nigro-brunnea 40-60 μ . lata limitato, margine irregulariter radiatim fibrosulis, olivaceo-brunneis; ascis fusoido-clavatis, supra rotundatis crasseque tunicatis, infra breviter acutatis et subventricosis, octosporis, 30-32 \times 6-9, apapophysatis; sporidiis distichis, hyalinis, utrinque rotundatis, elongato-clavatis, supra latioribus, biseptatis, ad septa non constrictis, 7,5-10 \times 2-3.

Hab. in foliis vivis *Paratropiæ* sp. in silvis prope Tjibodas in ins. Java. — *M. manaosensi* P. Henn. valde affinis.

10. *Micropeltis longispora* Earle, *Bull. of the New York Bot. Gard.* 5112 (1904) p. 311. — Epiphylla; peritheciis sparsis, facile secedentibus, obscure brunneis, rugulosis, 300-400 μ . cr., hemisphærico-applanatis, umbilicatis, ostiolo subcollabescente, contextu tenuiter prosenchymatico, fibrillis subiculum sterile applanatum 100-200 μ . lat. efformante; ascis ellipsoideis, apapophysatis, 70-80 \times 25-30; sporidiis cylindræis, sæpe curvulis, hyalinis, multiseptatis, granulosis, apice obtusis, 50-70 \times 8.

Hab. in foliis vivis *Coffæ arabicæ*, Porto Rico (HELLER). — A *M. Tonduzii* Speg. differt sporidiis latioribus, magis septatis, loculis omnibus æqualibus.

11. *Micropeltis Vrieseæ* Rehm, Ann. Mycol. V (1907) pag. 531. — 5113

Peritheciis epiphyllis, dispersis, in centro maculæ orbicularis albido-flavidulæ, ca. 1 mm. diam., tenuissime membranaceis, contextu prosenchymatico e cellulis 8-10 \times 5, radiantibus, dilute flavidulis conflato, singulis sessilibus, semigloboso-dimidiatis, æqualiter contextis, brunneis, poro pertusis, ca. 200 μ . diam.; ascis clavatis, apice rotundatis, 40-45 \times 9, octosporis; sporidiis fusiformibus, rectis, 3-septatis, haud constrictis, hyalinis, 15 \times 2,5, distichis; paraphysibus tenerrimis, ramosis, 1 μ . crassis.

Hab. ad folium *Vrieseæ*, Isola St. Catharina Brasilis (ULB).

— A japonica *Micropeltide bambusicola* defectu mycelii effusi grisei recedit.

12. *Micropeltis Sirie* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 380. 5114

— Peritheciis depressis, lenticularibus, nigris, 160-200 μ . diam. in maculis hypophyllis flavidis gregarie insidentibus, maturis ostiolo circ. 15 pilis peristomaticis rectis, acutis, 30 \times 3-4 circumdato, præditis, junioribus clausis; contextu e cellulis extus superne radiantibus formato, margine acute dentato, ambitu perithecorum non circulari sed sinuoso; ascis aparaphysatis, clavatis 40-46 \times 10, octosporis; sporidiis hyalinis, elongato-ovoideis, 14-15 \times 2,5-3, primum bilocularibus, dein 3-4-locularibus.

Hab. in foliis *Cubebæ caninæ*, prope Soenkanegara in Preanger, Java.

13. *Micropeltis Molleriana* Saccardo, Fungi aliquot africani, Bol. Soc. 5115

Broteriana v. XXI (1904-1905) pag. 6. — Peritheciis epiphyllis sparsis, dimidiatis, omnino planis, ambitu subcircularibus, 700-800 μ . diam., facile secedentibus, opace nigris et sæpe minute rugulosis, astomis; contextu minute celluloso olivaceo-fuligineo, cellulis 4-4,5 μ . diam., reticulato-seriatis (non radiantibus); peritheci marginem tenuissimo, eroso-fimbriato, hyalino; ascis obovoideis, utrinque rotundatis, sessilibus, 110-120 \times 50-55, paraphysibus intexto-fasciculatis, filiformibus, subhyalinis, 2 μ . cr. obvallatis; sporidiis tritetrastichis, fusoideis, sæpe curvulis, 80-86 \times 14-15, utrinque acutiusculis, e dilutissime flavido hyalinis, 3-septatis, medium interdum constrictulis.

Hab. in foliis languidis *Thecacoridis Mannianæ* ex Euphorbiaceis, Roça Bom Successo ins. S. Thomé, Junio 1885 (A. MOLLER). — Sporidiis magnis 3-septatis species statim dignoscitur.

14. *Micropeltis exilis* Schulz. in Flora (1877) p. 49. — Perexigua, 5116
gregaria; peritheciis dimidiatis, non sublinearibus nunc semiorbi-

cularibus v. scutiformibus, subrepandis, matrici non arcte adnatis, atris, poro rotundo pertusis, margine pori subelevato; ascis verticalibus aparaphysatis, crasse tunicatis, persistentibus, 5-6-sporis; sporidiis oblongo-subclavatis, triseptatis, nubiosis, hyalinis.

Hab. ad ramulos exsiccatos *Betulae albae*, *Eperies Hungariae*. — Var. *Carpini* Schulz. in *Flora* 1877, p. 50, t. II, t. 2. — Peritheciis punctiformibus 160 μ . diam., dimidiatis subsemiorbicularibus, nigris, tuberculosis, membranaceis, cortici arcte adhærentibus, poro rotundo v. elliptico apertis; ascis verticalibus, aparaphysatis, firmis, brevissime stipitatis, fere limoniformibus, 6-sporis; sporidiis cylindraceis utrinque rotundatis, 2-4-guttatis, constricto-1-septatis, 17-18 \times 4, hyalinis. — In ramulis *Carpini Betuli*, *Eperies Hungariae*. — Ubi sporidia didyma maneant vix *Micropeltis*.

15. *Micropeltis bambusina* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien 5117 CXVIII, Abt. I (1909) p. 322. — Peritheciis sparse gregariis, depresso hemisphaericis subdiscoideis, nigris, nitidulis, 200-300 μ . lat., superficialibus, ostiolo rotundato 12-20 μ . lato; contextu tenui minute parenchymatico, opaco; raro 2-4 peritheciis stromatice adnatis; paraphysibus crassis numerosis, ascos superantibus, muco conglutinatis; ascis clavato-fusoideis, supra attenuatis et obtusatis, 65-85 \times 10-12, tenuiter tunicatis, apice tantum incrassatis, octosporis, distichis v. tristichis, hyalinis, elongato-fusoideis, plerumque 6- raro 4-5-ocularibus, 22-28 \times 4-5,5.

Hab. ad culmos *Bambusae*, Tjibodas in ins. Java. — *Mic. bambusicolæ* P. Henn. affinis sed differt sporidiis usque 4-septatis, majoribus, membrana marginali pallidiori.

16. *Micropeltis Bambusae* Pat., Bull. Soc. Mycol. de France, XXII 5118 (1906) p. 57. — Mycelio superficiali nullo; peritheciis in soros 1-2 cm. diam. approximatis, dimidiatis, convexis, atris, nitentibus, c. 300 μ . latis, contextu opaco, rigido, distincte radiato, poro centrali pertusis, sæpe umbilicatis; ascis fusoideis, attenuato-stipitatis, 90-110 \times 12-14, octosporis; paraphysibus filiformibus, hyalinis, 1 μ . cr.; sporidiis oblique subdistichis, fusoideis, utrinque acutis, hyalinis, transverse 5-septatis (rarius 3-septatis), haud constrictis, 22-27 \times 5-6.

Hab. in culmis *Bambusae*, Papeenoo Tahiti, Polynesia.

17. *Micropeltis ? javanica* (Rac.) Sacc. et Trott., *Heterochlamis java-* 5119 *nica* Rac. Bull. Acad. Scienc. Crac. (1909) p. 381. — Mycelio hypophyllo, aereo primum radiatim se evolvente, nigro, ramosissimo,

setulis et hyphopodiis destituto; hyphis septatis 4-5 μ . cr. discum substromaticum nigrum laxiusculum efformantibus ad marginem nonnullis liberis et usque ad 80 μ . long.; peritheciis sub disco evolutis, 220 μ . diam. apice ostiolo 8 μ . diam. præditis; paraphysibus paucis filiformibus, brevibus; ascis cylindraceis, clavatis, basi angustatis, apice depresso-rotundatis, 68-75 \times 14-16, octosporis; sporidiis distichis, virguliformibus, clavulatis, rectis v. curvulis, 3-4-septatis, hyalinis (serius forsan obscure coloratis) levibus, 22-28 \times 4-6.

Hab. in foliis *Tetraceræ* sp. Buitenzorg Java.

SCUTELLUM Speg. — Syll. II p. 668, IX p. 1068, XVI p. 645.

1. *Scutellum microsporum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5120 (1909) pag. 427, cum icon. — Maculis nullis; peritheciis sparsis arcte adnatis coriacellis, convexulis, 200-250 μ . diam., centro stellatim rimosis, ambitu subintegerrimis; ascis obclavatis brevissime minuteque pedicellatis 50 \times 10, octosporis, paraphysibus filiformibus apice leniter incrassatis subcircinatisque commixtis; sporidiis obclavatis, biseptatis, hyalinis, 12 \times 3-4, ad septa non constrictis; an serius fuscis?

Hab. ad folia viva *Moyæ* ferocis prope Sancelito, Jujuy, Argentina America austr. — Habitu ad lichenes vergens sed gonidia omnino nulla.

ACTINIOPSIS Starb. — Syll. XVI p. 543, XVII p. 871.

1. *Actiniopsis atro-violacea* P. Henn., Hedw. XLVII (1908) p. 269, 5121 — Peritheciis epiphyllis sparsis, scutellatis, atris, ca. 250 μ . diam., ad marginem setulis rigidis, numerosis, subulatis e hyphis atro-violaceis, c. 3 μ . crassis, apice hyalinis laxè conflatis, c. 200-400 \times 15-40; ascis clavatis vel subfusoides, 8-sporis, 120-140 \times 10-15; paraphysibus copiosis flexuosis filiformibus, hyalinis c. 2 μ . cr.; sporidiis subdi- v. subtristichis fusoides v. subclavatis, obtusiusculis, hyalinis, 9-11-septatis, constrictis, c. 50 \times 4-5.

Hab. in foliis *Tapuræ* sp., Iquitos, Peruvia.

2. *Actiniopsis congensis* P. Henn., in Fl. du Bas- et Moy-Congo, 5122 v. II, fasc. II (1907) p. 99. — Peritheciis hypophyllis superficialibus sparse gregariis, rotundato-subscutellatis, atro-cellulosis, c. 100-130 μ . cr., margine setulis numerosis subulatis, erectis connatis, rigidis, atris, septatis apice obtusis vel acutiusculis usque ad 300-400 \times 4-6 vestitis, basi hyphis repentibus, ramosis, fuscis, 2,5-

4 μ . cr. circumdatis; ascis clavatis vertice obtuso-rotundatis, 4-8-sporis, 60-80 \times 10-14; sporidiis parallelis cylindraceo-clavatis, superne obtusis, inferne subacutiusculis, pluriguttulatis dein 5-7-septatis haud constrictis, hyalino-cyanescentibus, 40-60 \times 3-3,5.

Hab. in foliis *Psophocarpi palustris*, Kisantu Congo, Afr. trop. (VANDERYST).

3. *Actinopsis separato-setosa* P. Henn., Hedwigia XLVII (1908) 5123 p. 269. — Peritheciis epiphyllis sparsis v. gregariis subscutellatis ad marginem setosis, hyphis fibrosis radiatis circumdatis, conidiis ovoideis v. clavatis, fuscis 1-3-septatis, 20-30 \times 5-8, poro medio pertusis, cellulosis, atro-fuscis, c. 250-280 μ . diam., setulis simplicibus, rigidis, atro-fuscis, apice pallido obtusis, ca. 120-250 \times 5-6; ascis clavatis, obtuse rotundatis, 8-sporis, 90-140 \times 20-30; sporidiis parallelis, cylindraceis, utrinque obtusis, interdum, ad basim attenuatis, 20-26-septatis, constrictiusculis, hyalinis 70-100 μ .

Hab. in foliis *Hirtellæ americanæ* Aubl., Amazonas, Juruá-Miry, Brasilia.

ACTINOPELTIS v. Höhnelt, Ergeb. Bot. Exp. Südbres., 1901 in Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 17 (Etym. *actin* radius et *pelte* scutum). — Perithecia superficialia, obturbinata non scutata, membranacea, radiatim cellulosa, ostiolo setulis circumdato. Asci clavati; sporidia multiseptata, hyalina. — A gen. *Micropeltide* peritheciis vertice corona setarum ornatis et convexo-conicis dignoscitur. — Prof. v. Höhnelt locat genus inter *Microthyriaceas*, sed perithecio alte convexo et subintegro non parum recedit. An potius *Sphaeriaceæ*?

1. *Actinopeltis peristomalis* v. Höhnelt, l. c. p. 17, taf. I, fig. 3. — 5124 Peritheciis superficialibus, sparsis vel gregariis, nigris, tenuibus, brunneis, membranaceis, subiculo destitutis, crasse lenticularibus, turbinatis, 80-100 μ . lat., 50 μ . alt., supra depresso-conoideis, infra depresso squamiformibus, ceterum rotundato-subangulosis; ostiolo depresso, irregulariter rotundato, 12-16 μ . diam.; pilis brunneis, obtusis, septatis, horizontaliter patentibus usque ad 50 μ . long., 2-2,5 μ . cr., in seriem simplicem circulariter dispositis; paraphysibus indistinctis; ascis crasse clavatis, basi inflatis, supra rotundatis, crasse tunicatis, octosporis; sporidiis di- v. tristichis, hyalinis, rectis v. leniter curvulis, cylindraceo-fusoideis, utrinque acutatis, transverse 5-septatis, circ. 20 \times 4.

Hab. in frondibus *Filicis* ejusdam, Raiz da Serra prope San-

tos, Sao Paulo Brasilia. — Socia *Hyphonectria byssiseda*. Ad hoc novum genus verisimiliter pertinet etiam *Micropeltis Alang-Alang* Racib.

Sect. 5. Hyalodictyæ.

SACCARDINULA Speg. — Syll. IX p. 1071, XIV p. 692, XVI p. 645.

1. **Saccardinula tahitensis** Pat., Bull. Soc. Mycol. Fr. XXII (1906) 5125 p. 55. — Mycelio epiphylo, subpelliculoso, maculas fuscas, sub-orbiculares, 3-10 mm. diam. efformantibus ex hyphis intricatis, articulis cylindraceis $10-20 \times 4-6$ fumosis composito; peritheciis superficialibus, sparsis, atris, umbilicatis, ostiolo minuto 60 μ . diam. pertusis, membranaceis, contextu e cellulis 10-20 μ . latis, inordinatis; ascis elongatis 80×25 , apice rotundatis deorsum attenuatis, substipitatis, octosporis, aparaphysatis; sporidiis cylindraceo-ellipsoideis, rectis utrinque obtusis, $28-39 \times 8-10$, hyalinis, 3-5-septatis ad septa constrictulis, loculis mediis septo altero longitudinali divis, primitus tunica mucosa obvolutis dein nudis.

Hab. ad folia viva *Coffeæ* nec non *Psidii*, Tahiti Polynesia. — *S. costaricensi* Speg. sed ascis elongatis et sporidiis minus frequenter septatis.

2. **Saccardinula Usteriana** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 30, fig. H. — Subiculo nullo v. vix manifesto; peritheciis sæpius hypophyllis sparsis v. hinc inde laxe gregariis hemisphærico-peltatis 100-120 μ . diam., convexulis coriacellis contextu indistincto, centro per ætatem stellatim dehiscentibus, margine fimbriatulis atque subiculo tenuissime parcissimoque toruloso-celluloso cinctis; ascis antice obtusissime rotundatis crassiusculeque tunicatis postice subrotundato-cuneatis brevissime crasseque pedicellatis $50-60 \times 20-40$, aparaphysatis, octosporis; sporidiis conglobatis elliptico-fusoideis utrinque obtusiusculis primo dense cribroso-guttulatis, $35 \times 10-12$, tunica crassissima, 5 μ . cr., mucosa hyalina vestitis dein transverse 7-septatis, ad septa constrictis, præcipue ad medium, loculis septis longitudinalibus 1 vel 2 divis, $25-28 \times 8-10$, hyalinis.

Hab. ad folia coriacea *Coffeæ* et *Myrtacearum* in Horto bot. Sao Paulo, Brasilia (USTERI). — Species vulgata videtur, sporidiis mucoso-vestitis mox dignoscenda.

Sect. 6. Phæodictyæ.

PHÆOSACCARDINULA P. Henn. — Syll. XVII p. 873.

1. *Phæosaccardinula ficola* P. Henn., Engl. Jahrb. XXXVIII (1905) 5127 pag. 114. — Maculis fuscidulis, effusis; peritheciis superficialibus sparsis, dimidiato-scutellatis, c. 200-300 μ . diam, contextu atro-cœruleis v. fuscis, radiato-cellulosis, hyphis radiantibus ramosis, septatis, hyalinis v. fuscis, 2-3,5 μ . circumdatis; ascis ovoideis v. clavatis, vertice obtusis, subtunicatis, octosporis, 40-55 \times 18-30, paraphysibus sparsis, filiformibus, flexuosis, hyalinis; sporidiis conglobatis, oblonge clavatis, rectis v. subcurvulis, obtusis, 7-8-septatis, muralibus, primo hyalinis dein fuscis, cellulis constrictis, 20-30 \times 6-9.

Hab. in foliis *Fici* sp. Amani, Usambara orient. Africae centr. (ZIMMERMANN).

Sect. 7. Scolecosporæ.

SCOLECOPELTIS Speg. — Syll. IX p. 1072, XIV p. 646, XVII p. 874.

1. *Scolecopeltis dissimilis* Rehm in Theissen, Ann. Mycol. (1910) 5123 p. 462, cum icon. — Peritheciis hypophyllis, sparsis, rotundato-scutellatis, atris, 200-270 μ . diam., medio collapsis, ambitu annulo fusco-lanoso cinctis, contextu non radiato; ascis late elliptico-saccatis, pedicello brevi contracto, supra late rotundatis, 75-85 \times 42-45; sporidiis in asco parallelis, longitudine fere asci, 55-75 \times 6 $\frac{1}{2}$, hyalinis, rectis v. leniter curvis, 10-15-septatis, non v. vix constrictis (articulis secedentibus?).

Hab. in foliis in Brasilia. (Indicatio matricis et loci l. c. desideratur!).

2. *Scolecopeltis trivialis* Raciborski, Bull. Ac. Sc. Cracovie (1909) 5129 p. 381. — Peritheciis nigro-carbonaceis, semilenticularibus, nitidis in hypophyllo irregulariter sparsis, ostiolo apicali præditis, 0,6-1 mm. latis; paraphysibus filiformibus, numerosissimis; ascis elongato-cylindræis, apice rotundatis, sæpe depresso incurvatis, 140-165 \times 12, octosporis; sporidiis junioribus fusoides, distichis, medio profunde constrictis, demum in loculos binos secedentibus; loculis singulis subclavatis, hyalinis, 16-21 \times 6, in eodem asco demum 2-3 transverse septatis.

Hab. epiphytica in *Trentepohlia* ad folia arborum variarum, Buitenzorg, Depok, Tjampea, Tjibodas in ins. Java.

Subgen. *Scolecopeltopsis* v. Höhn. — Perithecia superne circumcirca ala membranacea cincta.

3. *Scolecopeltis transiens* (v. Hohn.) Sacc. et Trott, *Scolecopeltopsis* 5130
transiens v. Höhn., *Fragm. zur Mykol.* (1909) VIII in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1186. — Peritheciis hypophyllis, sparsis, nigris, nitidulis obscure cyaneo leniter tinctis, tenuissime albo-marginatis, depresso scutatis, in sicco rugosulis usque ad 600 μ . latis, supra carbonaceo contextis insra tenuiter hyalino contextis, ostiolo subrotundo 8-10 μ . lato margine in alam membranaceam 200 μ . latam sensim tenuiore cyaneo-atram ambituque hyalinam abeunte; ascis numerosis sessilibus fusoido-clavatis apice tenui tunicatis basi in cuneatis pseudoparaphysatis octosporis; sporidiis di-tristichis primitus oblongo-clavatis deinde cylindraceis hyalinis utrinque rotundatis v. acutulis tandem 6-8-cellularibus constrictisque 40 \times 6, facile in articulos secedentibus.

Hab. in pagina inf. foliorum vivorum *Paratropiæ* spec. in silvis prope Tjibodas in ins. Java (v. HÖHNEL) et in foliis *Paysonæ* sp. Depok Java (RACIBORSKI). — Ad hoc subgenus quoque *Scolecopeltopsis æruginea* (Zimm.) v. Höhn., *Fragm. Mykol.* VI n. 218, p. 42, *Scolecopeltis æruginea* Zimm. — Syll. XVII, p. 874.

Subfam. 2. Asterineæ.

Sect. 1. Hyalosporæ.

ASTERULA Sacc. — Syll. I p. 47, IX p. 375, XI p. 254, XIV p. 692, XVI p. 646.

1. *Asterula Bruinsmai* Koord., *Botan. Untersuch.* (1907) pag. 171, 5131
 fig. 10 et taf. XII, fig. 17. — Peritheciis subdiaphanis, atris, sparsis, in mycelio atro subsuperficiali insidentibus, applanato-lenticularibus, 90-110 μ . diam., ostiolo circulari instructis; ascis clavatis; apice rotundatis, octosporis, 20-25 \times 9-10; sporidiis continuis, hyalinis, fusiformibus, utrinque obtusis v. rotundatis, rectis, 10-13 \times 3,25-3,50, biseriatis; paraphysibus nullis.

Hab. in foliis emortuis *Fici elasticæ* prope Penunggalan prov. Kedu ins. Java (KOORDERS).

Sect. 2. Hyalodidymæ.

ASTERELLA Sacc. — Syll. I p. 42, IX p. 393, XI p. 256, XIV p. 698, XVI p. 649, XVII p. 882.

1. *Asterella Rubi* (Fuck.) v. Höhn., Ann. Mycol. (1905) pag. 326, 5182
Actinonema Rubi Fuck., *Asteroma Rubi* (Fuck.) Sacc. — Syll. III, p. 202. — Peritheciis subrotundis, scutatis, 160 μ . diam., membranaceis e cellulis inordinate dispositis, brevibus, irregulariter sinuosis efformatis, olivaceo-brunneis, in subiculo matrici arcte adnato maculiformi tenui-membranaceo superficialibus; subiculi hyphis brunneis, rigidulis, 3-4 μ . cr., reticulatim connexis cellulisque parenchymaticis interpositis; ascis 8-15 pluribusve, oblongo-ovoideis, octosporis, brevissime stipitatis, 24-28 \times 8-12; sporidiis 2-3-seriatis, bicellularibus, hyalinis, 9-12 \times 3-4, ad septum non constrictis, cellula superiore brevior et latior; paraphysibus, brevibus, nodulosis, curvis.

Hab. in ramentis vivis *Rubi* idæi in Helvetia (MORTIER), Austria (v. HÖHNEL). — Var. *rhoïna* v. Höhn., l. c. — A typo maculis obsoletis, peritheciis et ascis paullo minoribus differt. — In ramulis vivis *Rhois* Cotini in Wiener Wald Austriæ (v. HÖHNEL).

- 2: *Asterella multiplex* (Rehm) Sacc. et Trott., *Asterina multiplex* 5183
Rehm, Ascom. exsicc. n. 1706, (1907) et Ann. Mycol. V (1907) p. 209. — Peritheciis in maculis epiphyllis orbicularibus, in ambitu subfibrillosis nigris, 3-4 mm. latis, sæpe confluentibus gregarie sessilibus, globulosis, parenchymatice centrifuge contextis, radiatim ad basim in hyphis mycelii septatis, subfuscis, 4-5 μ . cr., sessilibus, glabris, fusco-nigris, in apice demum stellatim apertis, senilibus rugulosis; hyphopodiis mycelii perraris, alternantibus, lobulatis, parvulis, setulis erectis subcurvatis, apice subobtusis, subfuscis, c. 150 \times 8-9 ad basim perithecii sessilibus; ascis ovoideis, crasse tunicatis, 50-60 \times 45-50, octosporis; sporidiis ovoideis medio septatis et constrictis, hyalinis, 20-25 \times 10-12; paraphysibus ramosis 2-3 μ . cr.

Hab. in pagina sup. foliorum *Styracis*, Sao Leopoldo Rio Grande do Sul, Brasilia (Prof. J. RICK).

3. *Asterella Missionum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5184 (1909) p. 428. — Plagulis orbicularibus, sæpius epiphyllis 3-5 mm. diam., atris, subpelliculosis, glabris; peritheciis prosenchymaticis suborbicularibus 120-150 μ . diam., dimidiato-scutatis, astomis, atris, opacis; ascis ellipsoideis utrinque rotundatis apice crasse tunicatis, basi crasse brevique umbonato-pedicellatis 70-80 \times 30-35, octosporis, pseudoparaphysatis; sporidiis subclavulatis didymis, 40 μ . long. loculis inæqualibus, supero 18 \times 15-16, infero 22 \times 12, hyalinis, conglobatis.

Hab. ad folia viva Pruni, Symploci nec non Ilicis, in silvis prope Campina de Americo, Misiones, Argentina, America austr.

4. *Asterella Erithalidis* Ell. et Ev. in Millsp. Publ. Field Columb. Mus. Bot. II n. 1 (1900) p. 15, t. 50. — Hypophylla; mycelio laxo paginam sup. foliorum occupante, sed maculas vix formante; filamentis reticulato-ramosis; hyphopodiis capitatis obovatis, 15-20 \times 5; hyphopodiis mucronatis elongato-conicis, 12-15 \times 5-6; setis e mycelio orientibus, 150-250 \times 5; peritheciis globoso-membranaceis, subastomis, 80-100 μ . diam.; ascis oblongis, 20-30 \times 8-10; sporidiis subdistichis, oblongis, 1-septatis, hyalinis, vix constrictis, 6-8 \times 3-3,5.

Hab. in foliis *Erithalidis angustifoliæ* in insula Grand Cayman Antillarum.

5. *Asterella virescens* (Spegazz.) Sacc. et Trott., *Asterina virescens* 5186 Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 28. — Peritheciis epiphyllis, astomis radiatim dehiscentibus, margine vix repandulis, 200-220 μ . cr., contextu minutissime parenchymatico radiante olivaceo subopaco, areola hypothallina latiuscula oculo nudo sordide albescente, sub lente e cellulis cuboideis seriatim radiantibus grosse 1-guttulatis constitutis, cinctis; ascis subcylindraceis antice obtusissime rotundatis, parum infra medium leniter incrassatulis, postice cuneatis breviuscule pedicellatis, 80 \times 10, paraphysibus filiformibus vix longioribus apice minute incrassatulis, obvallatis, octosporis jodi, ope nulla; sporidiis oblique distichis utridue obtusiusculis 16-20 \times 4, medio 1-septato-constrictis, loculis diblastis, hyalinis.

Hab. ad folia viva *Bignoniaceæ* cujusdam, Ipiranga Cambucy Brasilia (USTERI). — Species sat dubiosa hypothallo lichenino sed gonidia non visa.

6. *Asterella olivacea* v. Höhn. in Rehm, Ann. Myc. III (1905) p. 326 5187

et Ascom. exsicc. n. 1623. — Peritheciis sparsis, tenui-membranaceis, 150-190 μ ., depresso scutatis, olivaceo-virentibus, astomis, contextu parenchymatico, sed non radiato, cellulis 2-4 μ . diam., margine primitus tenuiter hyalino-fimbriatis; ascis globoso-ovoideis, 25 \times 12-18, sursum crasse tunicatis, octosporis, aparaphysatis; sporidiis oblongis, utrinque rotundatis, tenui-tunicatis, hyalinis, medio leviter constrictis septatisque, 9-12 \times 4-5, interdum articulis secedentibus.

Hab. in foliis adhuc viridibus Buxi sempervirentis intra Speluncam pr. Erisa in ins. Corsica (v. HÖHNEL). — Ob subiculi defectum, potius est *Microthyrii* sp., sed contextus perithecii, teste v. Höhnel, *Asterellæ*. An recte hujus loci?

7. *Asterella tenuissima* (Petch) Sacc. et Trott., *Asterina tenuissima* 5188
Petch, Ann. Roy. Bot. Gard. Peradenya III (1906) Pt. I, p. 1. — *Tenuissima* late effusa, maculam nebulosam in ramulis et fructibus formans; hyphis repentibus brunneis, 4-5 μ . diam., glabris, in stratum mucosum deinde junctis, multas erectas, septatas, olivaceas, acutas hyphas, 90-100 μ . gerentibus; peritheciis applanatis, nigris, 130-160 μ . diam., ostiolatis; ascis clavatis, 30-40 \times 9-12; sporidiis uniseptatis, constrictis, hyalinis, fusoides, 13 \times 4.

Hab. in ramulis vivis fructibusque Hevæ brasiliensis Ceylon. — An *Aster. nubecula* B. et Br.?

8. *Asterella aliena* (Ell. et Ev.) Sacc. et Trott., *Asterina aliena* Ell. 5189
et Gallow. in Ell. et Ev., North Amer. Pyr. (1892) p. 36. — Mycelio crustaceo maculas subellipticas 0,5-1 \times 0,2-0,5 cm. brunneo-marginatas distincte limitatas efformante; peritheciis amphigenis, lenticularibus, subconfluentibus, 150-200 μ . diam., celluloso-fibrosis et margine reticulato-fimbriato præditis; ascis primum ovoideis, deum subelongatis 50-60 \times 20, breviter stipitatis, octosporis; sporidiis inordinatis, obovoideis, granulosi, hyalinis (dein uniseptatis?) 13-15 \times 4-5.

Hab. in foliis Ananassæ sativæ cultæ, Washington D. C. Americæ bor.

Sect. 3. Phæodidymæ.

ASTERINA Lévl. — Syll. I p. 39, IX p. 379, XI p. 255, XIV p. 693, XVI p. 646, 1141, XVII p. 875.

1. *Asterina Derridis* P. Henn., Hedwigia XLVII (1908) p. 260. — 5140

Peritheciis hypophyllis gregariis in maculis atris effusis, dimidiato-scutellatis, radiato-cellulosis, brunneis, poro pertusis 70-90 μ ., hyphis radiatis, ramosis, septatis, fusco-brunneis, 3-3,5 μ . circumdatis; ascis ellipsoideis v. ovoideis, vertice tunicatis, 8-sporis, 20-30 \times 20-25; sporidiis conglobatis ovoideis v. ellipsoideis, 1-septatis, constrictis, hyalinis deinde fuscidulis granulatis, 11-16 \times 6-8.

Hab. in foliis *Derridis uliginosæ*, Mindanao, Davao ins. Philippin. (COPELAND).

2. *Asterina Combreti* Syd., Engler's Bot. Jahrb. 45. Bd. (1910) p. 264. 5141

— Maculis mycelii plerumque epiphyllis, rotundatis v. effusis, 2-4 mm. diam.; mycelio ex hyphis repentibus varie ramosis anastomosantibus parce septatis 3,5-4,5 μ . cr., hyphopodia alternantia, 1-septata, brevi-stipitata, c. 8-10 μ . longa, 4-5 μ . cr. gerentibus composito; peritheciis gregariis, punctiformibus, atris, amœne radiatim contextis, stellatim dehiscentibus, 90-175 μ . diam.; ascis globosis, subglobosis v. ovatis, 28-40 \times 28-32, octosporis, paraphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, medio 1-septatis et constrictis, primo hyalinis dein brunneis, 14-19 \times 8-11; pycnidiis ad genus *Asterostomellam* pertinentibus, eadem forma et structura ut perithecia sed paullo minoribus; sporulis ellipsoideis v. piriformibus, continuis, brunneis, 18-21 \times 10-13.

Hab. in foliis *Combreti tavetensis*, Kibwezi Africa trop. britannica (SCHEFFLER).

3. *Asterina Sidæ* Earle, Bull. N. York Bot. Gard. III (1904) p. 310. 5142

— Plerumque epiphylla, maculas indefinitas, tenues, nigricantes 2-4 mm. diam. efformante; mycelio angusto, e filamentis zig zag formiter radiantibus 4 μ . cr. constituto; hyphopodiis sessilibus, irregulariter et conspicue 3- v. 4-lobatis, 7-8 μ .; peritheciis numerosis, sparsis, 80-100 μ . diam., convexo-applanatis, ex hyphis obscuris, opacis, fortiter conglutinatibus radiantibus, subostiolatis, lacerato-stellatis; ascis subglobosis, octosporis, 20-25 μ . diam.; sporidiis inordinatis, ovoideis subinæqualiter uniseptatis, fortiter constrictis, fuliginis, 14 \times 8.

Hab. in foliis vivis *Sidæ carpinifoliæ*, Jamaica (EARLE), Porto Rico (HELLER).

4. *Asterina Balansæ* (Speg.) Sacc. et Trott., *Seynesia Balansæ* Speg. 5143

— Syll. IX, p. 1065 — var. *macrocarpa* Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 28 (*Asterella*). — A typo recedit ascis majoribus angustioribusque, 50-60 \times 20-25; sporidiis elliptico-obovatis 20 \times 10, loculis subæquilongis, supero ovato obtuso, infero

conoideo acuto, primo hyalinis dein plus minusve intense fuliginis.

Hab. ad folia Melastomataceæ cujusdam prope Ipiranga Brasilæ (USTERI).

5. *Asterina Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) 5144 p. 130, XIX (1909) pag. 428, cum icon. — Subiculo parvissimo, plagulas tenuissimas orbiculares 3-7 mm. diam., sæpius hypophyllas subnubilosas fuscas constituyente; peritheciis laxè gregariis grosse parenchymatico-cellulosis, latissime fimbriato-ostiolatis, 100 μ . diam.; ascis subglobosis, 3-8 in quoque perithecio, superne rotundatis crasseque tunicatis basi subcuneatis brevissime pedicellatis 50-70 \times 40-50, octosporis, aparaphysatis; sporidiis conglobatis cylindræis utrinque rotundatis, 38-40 \times 16-18 ad septum constrictis, grosse 1-guttulatis, primo hyalinis dein fuliginis.

Hab. ad folia viva Ilicis paraguariensis prope San Pedro, Misiones, Argentina America austr.

6. *Asterina echinospora* v. Höhn., Fragm. z. Mykol., X (1910) in 5145 Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 440. — Plagulis nigris, 2-3 mm. latis, rotundatis, bene limitatis, sparsis, epiphyllis; subiculo arcuato adnato, tenui, ex hyphis brunneis 4-6 μ . lat. laxè ramoso-reticulatis constituto; hyphopodiis unilocularibus elongatis, 10 \times 4-5; peritheciis cæspitosis, fortiter convexis medio sæpe umbilicatis, nigris, subcircularibus, 150-240 μ . latis; paraphysibus nullis; ascis ovoideis, basi acutatis, extus leniter mucosis, octosporis, 44-48 \times 36; sporidiis brunneis, bilocularibus, crebre hyalino-aculeolatis, utrinque rotundatis, loculo inferiori angustiore, ad septum constrictis, 26-29 \times 12-14.

Hab. in foliis Cansjeræ Rheedii, Ceylon (THWAITES). —

Asterinæ Loranthacearum Rehm præcipue affinis.

7. *Asterina crustacea* (Ell. et Ev.) Sacc. et Trott., *Asterella crustacea* Ell. et Ev. in Millsaugh, Publ. Field Columb. Mus. Bot. II (1900) n. 1, p. 15, t. 51. — Epiphylla; mycelio subcrustoso, maculas orbiculares nigras 2-3 mm. diam., formante, ramoso-reticulato, sine hyphopodiis et setis; peritheciis lenticularibus, tenuibus, applanatis, 0,5 mm. diam., ostiolo papillato, subinde compresso; ascis clavato-oblongis, subsessilibus, 70-80 \times 15-20; sporidiis obpiriformibus 1-septatis, initio hyalinis et strato hyalino obvolutis demum brunneis, constricto-1-septatis, cellula superiore elliptica et latiore, inferiore obconica.

Hab. in foliis Psidii Guajava in insula Grand Cayman Antillarum.

8. *Asterina leopoldina* Behm, Ann. Mycol. V (1907) p. 521. — Mycelio hypophyllo, plagas orbiculares, demum confluentes, 2 cm. lat., formante, arachnoideo, nigrescente, ex hyphis centrifugis, rectangulariter ramosis, undulatis, subfuscis, septatis, 4-5 μ . lat., tenuissimis formato, hyphopodiis singulis, lobulatis, 9 μ . lat. et alt., simplicibus obsesso; peritheciis in centro macularum mycelii dispersis, semiglobosis, ad marginem centrifuge dendriticis, fusciculis, glabris, poro demum stellatim expanso, 180-300 μ . diam.; ascis clavatis, apice crasse tunicatis, 80 \times 30, octosporis; sporidiis clavatis, 2-cellularibus, cellula superiore latiore, medio subconstrictis, hyalinis, dein fusciculis, 25-30 \times 10-12; paraphysibus 4 μ . cr. septatis conglutinatis.

Hab. ad folia Myrtaceæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.).

9. *Asterina dispar* Speg. — Syll. IX, p. 384 — var. *paraphysata* Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 27. — Ascis obovatis, 60-80 \times 30-40, paraphysibus submucosis obvallatis, sporarum loculo supero sphaerico 16 \times 16, infero conoideo 12 \times 10, acutiusculo, adhuc hyalinis visis.

Hab. ad folia viva Myrtaceæ cujusdam in hortis Sao Paulo Brasilia (USTERI).

10. *Asterina typhospora* R. Maire, Ann. Mycol. VI (1908) p. 148, fig. 4. — Mycelio epiphylllo, plagas atras, orbiculares v. ellipticas, sæpe confluentes, 2-5 mm. diam., efformante, arachnoideo; hyphis brunneis, 5-6 μ . diam., rectis, vel rarius flexuosis, plus minusve rectangulariter ramosis et anastomosantibus, septatis; hyphopodiis perraris, globosis, unicellularibus, sessilibus, 6 μ . diam.; haustoriis dendroideis, intra cellulas hypodermatis ramosis; peritheciis scutatis, atris, glabris, ostiolo centrali circulari pertusis, contextu prosenchymatico radiante, margine hyphis contortis fimbriatis; ascis octosporis clavatis, apice crassius tunicatis, 90-105 \times 28-30; sporidiis 36-40 \times 16-18, clavatis v. obovato-clavatis, levibus, ex hyalino fuligineo-brunneis, uniseptatis, cellula superiore globosa v. subglobosa, latiore, cellula inferiore angustiore, cylindracea v. clavata, recta v. curvula, longitudine cellulam superiorem æquante v. paululum superante; paraphysibus conglutinatis parum evidentibus.

Hab. in foliis vivis Myrtaceæ cujusdam, Mandagui prope Sao Paulo, Brasilia.

11. *Asterina ? megalosperma* Speg., Fungi Paulist., Rev. Mus. La 5150

Plata t. XV, p. 27. — Maculis nullis; peritheciis hinc inde laxè gregariis astomis, 250 μ . cr., scutatis centro radiato-fimbriatis dehiscentibus, subiculo nullo v. parcissimo cinctis, contextu subindistincto brevissime prosenchymatico; ascis paucis substantia mucoso-parenchymatica hyalina comitatis, antice obtusissime rotundatis, postice breviter cuneatis, pedicello parvulo nodulosoque suffultis 60-70 \times 40-50, crasse tunicatis, octosporis; sporidiis conglobatis rectis v. curvulis utrinque subacutato-rotundatis, 35-40 \times 11-15 levibus, loculis facillime secedentibus, hyalinis (an demum fuliginosis?).

Hab. ad folia coriacea Myrtacearum quarumdam circa Ipiranga Brasilia (USTERI).

12. *Asterina pontica* Bub. in Handel-Mazzetti Bot. Reis. Pont. Ran. 5151

dyeb. in Ann. Naturhist. Hofmus. Wien (1909) XXIII, p. 102, t. V, f. 1 a-f. — Peritheciis ramicolis, diffusis v. aggregatis, initio subepidermicis, dein nudis, rotundatis, v. irregulariter rotundatis, planis, discoideis, nigris, opacis, centro paulum concavis, hinc poro brevi, conico apertis; contextu radiato, castaneo-brunneo, 200-400 μ . lat.; ascis oblongis, 30-45 \times 22-25, ad apicem valde attenuatis flexuosisque, octosporis; sporidiis oblongis, 12-15 \times 4-4.5, medio uniseptatis, loculo inferiore paulo crassiore, utrinque attenuatis, subdistichis, olivaceo-brunneis.

Hab. in ramis *Daphnes ponticæ* var. *Szowitzii* et *D. glomeratæ* in montibus ponticis Anatoliæ.

13. *Asterina Lorantheorum* Rehm, Ann. Mycol. V (1907) p. 522. 5152

— Maculis hypo- et epiphyllis, orbicularibus, nigris, tenuissimis, 3-5 mm. diam.; peritheciis globulosis, in medio maculæ creberrime sessilibus, poro pertusis, glabris, tenuiter parenchymatico-contextis, fusco-nigris, 70-100 μ . diam., demum stellatim apertis, in mycelio hypharum paucarum fuscis septatarum, 4-5 μ . latarum, hyphopodia alternantia oblonga 7-10 \times 4-5, interdum bicellularias gerentium sessilibus; ascis ovalibus crasse tunicatis, 30 \times 20, octosporis; sporidiis clavatis, 2-cellularibus, medio subconstrictis, demum subfuscis et scabriusculis, 20 \times 10; conidiis ellipsoideis, subfuscis, 3-septatis, 18-20 \times 5-6.

Hab. in foliis *Loranthaceæ*, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK S. J.). — Perithecia ægre conspicua.

14. *Asterina Strophanthi* P. Henn., Engl. Jahrb. XXXVIII (1905) 5153

p. 125. — Maculis subfuscis; peritheciis epiphyllis gregariis

lenticularibus, atro-castaneis, radiato-cellulosis, 70-120 μ . diam., margine pallidiori, hyphis repentibus, ramosis, septatis, atro-fuscis, 2,5-3,5 μ . cr., conidiis ovoideis, basi apiculatis, atro-brunneis 18-22 \times 10-13; ascis ellipsoideis v. ovoideis, vertice tunicatis, 8-sporis, 25-38 \times 18-22; sporidiis conglobatis ovoideis, primo hyalinis, medio 1-septatis, valde constrictis, 13-16 \times 7-8, atro-brunneis.

Hab. in foliis *Strophanti hispidi*, Lome Togo Africae centr. (WARNECKE). — Status conidiophorus: cfr. *Asterostomella Strophanthi*.

1. *Asterina kwangensis* P. Henn., in Fl. du Bas- et Moy.-Congo, 5154 Ann. Mus. du Congo v. II, fasc. II (1907) p. 99. — Peritheciis dense gregariis plerumque epiphyllis, lenticularibus v. subdiscoideis, atris, contextu radiato-fibrilloso, centro pellucido, radiato-lobato-dehiscentibus c. 90-120 μ . diam., hyphis radiantibus, ramosis, atro-fuscis, c. 3-4 μ . cr. circumdatis, pseudopodiis ovoideis, murali-divisis 10-12 \times 5-8; ascis ovoideis rotundato-obtusis subtunicatis 8-sporis, 18-25 \times 15-20; sporidiis conglobatis ellipsoideis, medio valde constrictis, atro-castaneis, 12-15 \times 5-7.

Hab. in foliis *Asclepiadaceæ* cujusdam, Kisantu Congo, Afr. trop. et in foliis *Malvaceæ*, Boko Sainte-Barbe Congo, (VANDERYST).

16. *Asterina triloba* Earle, Bull. New York Bot. Gard. III (1904) 5155 p. 310. — Epiphylla, maculas nigras 2-4 mm. diam. sæpe confluentes efformante; mycelio subangusto, ex filis fuscis, 4 μ . circ. cr., hyphopodiis sparsis, sessilibus, irregularibus, sed plerumque trilobatis, 7-8 μ . circ. cr.; peritheciis copiosis, scutatis, ex fibrillis radiantibus, nonnullis marginem excedentibus et subiculum *Lembosice* simile efformantibus, 30-50 μ . lat., stellatim disrumpentibus 90-120 μ . diam.; ascis e late ovoideis suborbicularibus, circ. 25-30 μ .; sporidiis maturis hyalinis dein obscure brunneis; subæqualiter uniseptatis, constrictis, ellipsoideis, apice obtusis, circ. 20-25 \times 8-9.

Hab. in foliis vivis *Crotonis discoloris*, Limestone Hills, Porto Rico (HELLER). — *Ast. crotonicolæ* Pat. similis sed hyphopodiis trilobis, sporidiis minoribus diversa.

17. *Asterina Usterii* R. Maire, Ann. Mycol. VI (1908) p. 146, fig. 3, 5156 tab. I, fig. 2. — Mycelio epiphylllo, plagas atras, orbiculares vel ellipticas, sæpe confluentes, 2-5 mm. diam., efformante, arachnoideo-reticulato; hyphis fuscis, 3-5 μ . diam., rectis vel rarius flexuosis, rectangulariter ramosis et anastomosantibus, septatis; hyphopodiis numerosis, alternis, globosis v. subglobosis, unicellularibus,

sessilibus, alternantibus, 4-5 μ . diam.; haustoriis in cellulis epidermatis, rarius hypodermatis dense ramosis, ramis conglobatis; peritheciis scutatis, aterritis, subcarbonaceis, glabris, ostiolo centrali circulari pertusis vel subastomis, irregulariter dehiscentibus; contextu prosenchymatico radiante, margine hyphis rectis fimbriatis; ascis octosporis ovoideis vel ellipsoideo-oblongis, 33-40 \times 13-23, apice crassius tunicatis; sporidiis distichis vel conglobatis, 15-21 \times 6-10, clavatis vel obovato-clavatis, medio septatis et valde constrictis, levibus vel minutissime rugulosis, ex hyalino fuligineo-brunneis; cellula superiore subglobosa v. breviter ellipsoidea, inferiore subæquilonga, angustiore; ovoidea v. ovoideo-ellipsoidea; paraphysibus, tenuibus, septatis, simplicibus vel breviter ramulosis, conglutinatis.

Hab. in foliis vivis Euphorbiaceæ cujusdam (an *Pseudotrophis*?), Alto da Serra prope Sao Paulo, Brasilia.

18. *Asterina Coccolobæ* Ferd. et Winge, Botanisk Tidsskrift XXIX 5157 (1908) p. 10, tab. I, fig. 2. — Maculis nullis; peritheciis in greges orbiculares, 1-2 mm. diam., dispositis, epiphyllis, atris, applanato-scutatis, structura distincte radiata, margine crenulato-fimbriato, ambitu irregulariter ellipticis v. subrotundis, circ. 175-350 μ . d., hyphis brunneis, septatis, sæpe anastomosantibus, 4,5-6,5 cr., hyphopodia semiglobosa 9-12 \times 6-8 gerentibus, cinctis; ascis late ellipsoideis ovoideisve, nonnumquam subglobosis, sessilibus, 38-50 \times 25-37; sporidiis octonis, conglobatis, cylindraceo-oblongis, utrinque subtruncatis vel late rotundatis, crasse tunicatis, 1-septatis, ad septum constrictis, 20-25 \times 8-11, juvenilibus flavidulis, maturis brunneis.

Hab. ad folia viva *Coccolobæ uviferæ* in insula St. Croix India occ. (RAUNKIAER).

19. *Asterina consimilis* v. Höhn. Fragm. Mykol. VII (1909) in Sitzb. 5158 k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 862. — Peritheciis nigro-opacis, scutellatis 200-250 μ . diam. in plagulis nigricantibus tenuibus usque ad 10 mm. latis insidentibus et regulariter sparsis; contextu perithecii opaco, ex hyphis 4-6 μ . latis radiatim dispositis constituto; ostiolo irregulariter radiatim laciniato; margine perithecii tenuiori irregulariter laciniato-lobulato; paraphysibus irregulariter ramosis supra brunneolis; ascis ovoideis, superne tunica fortiter incrassata, sessilibus, 4-8-sporis, 45-50 \times 24-25; sporidiis ovoideo-clavatis, bilocularibus, utrinque rotundatis, ad septum vix constrictis, 27-28 \times 13; loculo superiori paullo breviori et latiori,

contentu homogœneo; sporidiis diu hyalinis, maturis obscure brunneis; ascis Jodi ope flavidis.

Hab. in foliis arborum in Horto bot. Buitenzorg in ins. Java.

— *Ast. quartæ* Rac. affinis.

20. *Asterina valida* (Speg.) Sacc. et Trott., *Asterella valida* Spegazz. 5159

Fungi Paulist., Rev. Museo La Plata t. XV, p. 29. — Plagulis subiculi orbicularibus 3-8 mm. diam., arachnoideis matrici arctiuscule adnatis, atro-fumosis, ex hyphis 5-7 μ . cr., septulatis flexuosis, hyphopodiis destitutis, efformatis; peritheciis in centro plagarum plus minusve gregariis, dimidiatis 150-220 μ . diam., stellatim dehiscentibus, margine fimbriatulis membranaceis, contextu dense parenchymatico radiante subpellucido donatis; ascis antice obtusissimis crasseque tunicatis postice rotundato-cuneatis, brevissime minuteque pedicellatis e nodulo centrali subparenchymatico chlorino exsurgentibus, 70 \approx 60, octosporis, tunica per ætatem fuscescente; sporidiis conglobatis medio validiusculis constrictis utrinque obtusiusculis 20-30 \approx 12, uni-septatis loculis subisomorphis, primo hyalinis dein fuliginosis.

Hab. ad folia coriacea arbusculæ ignotæ cujusdam, Ipiranga até Moça, Brasilia (USTERL).

Subgen. *Clypeolella* v. Höhn. — Perithecium astoma.

21. *Asterina inversa* (v. Höhn.) Sacc. et Trott., *Clypeolella inversa* 5160

v. Höhn., Fragm. z. Mykol. X (1910) in Sitzb. k. Ak. d. Wiss. Wien, CXIX, Abt. I, p. 403. — Subiculo griseo-cinereo, rotundato, 5-10 mm. lato, sæpe plagulas tenues confluyendo latas efformante; hyphis violaceo-brunneis ramosis, arcte adnatis, 6-7 μ . latis, 16-32-articulatis, hyphopodiis unilocularibus, globosis, 9-10 μ . lat., præditis; peritheciis in subiculo sparsis, opacis, margine lobulatis, pariete tenui medio parenchymatico brunneo demum disrupto; ostiolo nullo; paraphysibus atypicis filiformibus, cellulari articulatis 5-6 μ . lat.; ascis numerosis, crasse tunicatis, ex ovoideo-piriformibus subglobosis, octosporis, 50-65 \approx 35-40, J. +; sporidiis hyalinis conglobatis, elongato-ovoideis, utrinque rotundatis, subteniter tunicatis, strato mucoso tenui cinctis, supra latioribus, bilocularibus, ad septum non constrictis plasmate subhomogeneous faretis, 22-24 \approx 10; conidiis in mycelio sparsis, trilocularibus, superne rotundatis, basi acutatis, 28-36 \approx 13-15; loculis binis superioribus brunneis, inferiore hyalino.

Hab. in pagina superiore foliorum coriaceorum leviorum serratorem viventium arboris cujusdam, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN). — Cum *Ast. silvatica* Speg., *Ast. Sapotacearum* Speg., *Ast. laxa* Wint. comparanda.

CHÆTASTERINA Bubák in Handel-Mazzetti Bot. Reis. Pontisch. Randgeb. in Ann. Naturhist. Hofmus. 1909, Wien XXIII, p. 102 (Etym. *chaete* seta et *Asterina*). — A typo gen. *Asterinae* recedit peritheciis ipsis copiose setigeris.

1. *Chætasterina anomala* (Cooke et Harkn.) Bub. l. c. *Asterina ano-* 5161
mala Cooke et Harkn. — Syll. I, pag. 49. — In foliis Pruni Laurocerasi in California et in mont. Ponticis.

MYXASTERINA v. Höhnelt, Fragm. Mykol. VII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 870 (Etym. *myxa* mucus et *Asterinae*). — Membrana peritheciali et subiculo ut in *Asterina*; nucleo mucoso. Asci aparaphysati, radiatim ex hyphenchymate basilari laxiusculo evoluti, breviter stipitati; sporidia brunnea, bilocularia.

1. *Myxasterina Strychni* v. Höhn., l. c. p. 868 et 871. — Peritheciis 5162
in subiculo tenui, folio arcte adnato insidentibus, scutellatis, margine lobulatis; ascis ex ovoideo-piriformibus breviter clavatis, superne crasse tunicatis, octosporis, 40-50 × 18; sporidiis conglobatis, elongatis, demum brunneis, bilocularibus, 12-16 × 5-6. — J. diu +.

Hab. in foliis *Strychni* sp., Depok in ins. Java.

Sect. 4. Hyalophragmiæ.

ASTERIDIUM Sacc. — Syll. I p. 49, IX p. 435, XI p. 269, XIV p. 699, XVI p. 650, XVII p. 785.

1. *Asteridium paulistanum* Spegazz., Fungi Paulist., Rev. Mus. La 5163
Plata t. XV, p. 29. — Peritheciis plerumque epiphyllis, matrici arctiuscule adnatis, dimidiato-scutatis, centro prosenchymaticis ambitu subanhystis pallidis, margine reticulatim fimbriolatis, 150-200 μ . diam.; ascis antice obtuse rotundatis crasseque tunicatis, postice cuneatis brevissime crasseque pedicellatis, 60-70 × 25-30, octosporis, aparaphysatis; sporidiis conglobatis rectis vel lenissime curvulis utrinque acutiuscule rotundatis, 32-36 × 6-7, primo 5-dein 7-postremo 9-septulatis, hyalinis, ad septum medium tantum constrictis.

Syll. fung. XXII (XI-1912)

Hab. ad folia coriacea Myrtacearum prope Ipiranga, Brasilia (USTERI).

2. *Asteridium membranaceum* (Spegazz.) Spegazz., Fungi Paulist., 5164 Rev. Mus. La Plata t. XV, pag. 30. — Ita vocanda *Micropeltis membranacea* Speg. — Syll. IX, p. 1069 — ex ipso auctore

Fam. 11. Lophiostomataceæ (*).

Sect. 1. Hyalodidymæ.

LOPHIOSPHÆRIA Trev. — Syll. II p. 675, IX p. 1075, XI p. 383, XIV p. 702, XVII p. 886.

1. *Lophiosphæria tahitensis* Patouill., Bull. Soc. Myc. Fr. XXII (1906) 5165 p. 58. — Peritheciis atris, subhemisphæricis, basi insculptis, carbonaceis $\frac{1}{2}$ - $\frac{1}{2}$ mm. diam., fragilibus, ostiolis vix prominulis, linearibus, labiis obtusis; nucleo albo; ascis cylindræis, basi attenuatis, apice rotundatis, 100-150 \times 15-19, octosporis, paraphysibus linearibus, simplicibus v. ramosis, hyalinis; sporidiis distichis, hyalinis, longe fusoides, 1-septatis, medio leniter constrictis, sæpe 4-guttulatis, 33-36 \times 6.

Hab. in endocarpio *Cocos* nuciferæ Tahiti, Polynesia.

2. *Lophiosphæria Chusqueæ* Speg., Fungi Chilenses (1910) pag. 100, 5166 cum icon. — Peritheciis laxè gregariis, lenticularibus, epidermide clypeatim nigrefacta tectis, ostiolo minimo lineari donatis, 250-300 μ . diam.; ascis subclavatis breviter cuneato-pedicellatis, dense paraphysatis, 110-130 \times 18-20; sporidiis distichis e fusoides biconoideis 1-septato-constrictis, majusculis, hyalinis, 35-40 \times 8-9.

Hab. in culmis siccis putrescentibus *Chusqueæ* valdiviensis, Bahia de Corral Chile Amer. austr. — Inter *Clypeosphæria* et *Lophiotrema* videtur media; sporidia vetustiora forsan triseptata.

3. *Lophiosphæria Sedi* (Hazsl.) Sacc. et Trav. — Syll. XIX, p. 1129, 5167 *Lophiostoma Sedi* Hazsl. Sphær. Hungar. p. 80, t. IV, f. 17. —

(*) *Lophiostomaceæ* Sacc. Mich. I, pag. 337 (1878), non Fuck! — *Sphæria* Sect. VIII *platystomæ* Pers. (1801) ex parte, *Platystomæ* Dumort. (1822).

A. Lophiotrema Sedi (Fuck.) Sacc. Syll. II, p. 687, videtur diversa sporidiis bilocularibus, nec 3-septatis.

Hab. in caule *Sedi* sp. in Hungaria.

LAMBOTTIELLA Sacc. — Syll. II, p. 677 (ut subgen. *Lophiosphæria*), XIV, p. 26. — A typo dignoscitur sporidiis appendiculatis. Ad hoc genus referendæ sunt: *Lamb. anaxæa* Sacc. — *Lamb. glacialis* (Rehm) Sacc. — *Lamb. bonariensis* (Speg.) Sacc. — *Lamb. pulveracea* Sacc. — *Lamb. Fuckelii* Sacc. (Cfr. Syll. II, pag. 677-678). — *Lamb. heterostoma* (Ell. et Ev.) Sacc. (Cfr. Syll. IX, p. 1075).

1. *Lambottiella chilensis* Speg., Fungi Chilenses (1910) p. 99, cum icon. — Peritheciis foliicolis parenchymate immersis, 150-180 μ . diam., ostiolo cristato, carbonaceo, pro ratione majusculo, tantum exerto; ascis clavulatis, breviuscule paraphysatis, pedicellatis, 90-100 \times 10-12, octosporis; sporidiis distichis, ellipsoideo-biconoideis, inæquilateralibus, 4-guttulatis, hyalinis, utrinque minute appendiculatis, 15-17 \times 4-5.

Hab. in foliis defectis putrescentibus *Perseæ Lingue*, Cerro Caracol de Concepcion Chile Amer. austr.

2. *Lambottiella corralensis* Speg., Fungi Chilenses (1910) p. 100. — Peritheciis matrici infusata plus minusve inscriptis, ostiolo minuto cristato carbonaceo coronatis, laxè gregariis, atris, glabris, 120-130 μ . diam.; ascis subcylindræis breviter cuneato-pedicellatis, parce paraphysatis, octosporis, 80-100 \times 7-10; sporidiis didymis, biconoideis, subnavicularibus, mediocribus, hyalinis, primo tunica mucosa tenui vestitis, dein nudis, utrinque apiculo conoideo minuto auctis, 16-25 \times 5-7.

Hab. in pedunculis emortuis *Francoæ sonchifoliæ*, Bahia de Corral Chile Amer. bor. — Sporidiis permaturis verisimiliter triseptatis et tunc gen. *Vivianellæ* adscribenda.

3. *Lambottiella mendax* (Rehm) Sacc. et Trott., *Lophiosphæra mendax* Rehm Ann. Mycol. V, (1907) pag. 544. — Peritheciis gregariis, innatis, demum superficialibus, globulosis, nigris, ca. 0,3-0,4 mm. diam., ostiolo in papillulam angustam brevem elongato, glabris; ascis clavatis, 50-70 \times 8-9, octosporis; sporidiis ellipsoideis, utrinque acutatis et filiformiter 2-3 μ . longe appendiculatis, bicellularibus, medio constrictis, utraque cellula 2-guttata, hyalinis, 12 \times 4, distichis; paraphysibus filiformibus, septatis, hyalinis, 1,5 μ . cr.

Hab. ad ramulum exsiccatum *Epilobii ?Fleischeri* supra Waidbruck Tirolæ austr. (Dr. REHM).

Sect. 2. Phæodidymæ.

SCHIZOSTOMA Ces. et De Not. — Syll. II p. 673, IX p. 1074, XI p. 382, XIV p. 702, XVI p. 650, XVII p. 387.

1. *Schizostoma incongruum* Rehm in Rehm et Rick in Broteria V 5171 (1906) p. 225. — Peritheciis in crusta nigra stromatica late effusa arcte congregatis, innatis, hemisphærico-prominentibus, globosis, apice rima tenuissima longitudinali, haud cristata apertis, atris, 0,3-0,5 mm. diam.; ascis cylindræis, longissimis, 12-14 μ . latis, octosporis; sporidiis fusiformibus, utrinque acutatis, medio septatis, utraque cellula crasse 1-guttatis, primitus hyalinis, dein fuscidulis, ad septum non constrictis, 30-35 \times 9-10, monostichis paraphysibus filiformibus, 2 μ . crassis.

Hab. in culmis Bambusæ Taquaræ in Brasilia. — *Schizostomati hysteroidei* affine.

Sect. 3. Hyalophragmiæ.

LOPHIOTREMA Sacc. — Syll. II p. 678, IX p. 1076, XIV p. 703, XVI p. 651, XVII p. 387.

1. *Lophiotrema argentinense* Spegazz., An. Mus. Nac. Buenos Aires 5172 t. XIX (1909) p. 430. — Peritheciis sparsis v. laxè gregariis, sub-superficialibus, subglobosis, 200-300 μ . diam., acute ostiolatis, glabris; ascis clavatis basi attenuatis et in pedicellum brevem crassiusculum productis, 120-130 \times 20, octosporis, paraphysatis; sporidiis oblique v. rectè mono-distichis, cylindræo-fusoideis, 7-septatis, 40-45 \times 10, loculis minute 1-guttulatis, hyalinis.

Hab. in ligno denudato carioso induratoque Prosopidis ejusdam, Alto Grande prov. San Luis, Argentina Americæ austr.

2. *Lophiotrema Halesiæ* Fairman Annal. Mycologici, v. VIII (1910) 5173 p. 329. — Peritheciis gregariis, minutis, atris, immersis dein erumpentibus, ostiolo emergente compresso sed angusto; ascis clavato-cylindræis, rectis v. curvulis, apice rotundatis, paraphysibus filiformibus obvallatis, 80-100 \times 10; sporidiis distichis, angustis, oblongo-fusoideis, sæpe lunatis v. sigmoideis, utrinque acuminatis, 5-septatis, vix constrictis, hyalinis, 27-33 \times 3,33 \times 4,50.

Hab. in cortice Halesiæ tetrapteræ cultæ, Lyndonville N. Y. Amer. bor.

3. *Lophiotrema coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 5174

(1909) p. 430. — Maculis nullis; peritheciis sparsis semiimmersis, minute et lineariter ostiolatis, carbonaceis, subglobosis, 120-150 μ . diam.; ascis fusoideis vix pedicellatis, 75-80 \times 10, paraphysatis, octosporis; sporidiis fusoideis 5-septatis, ad septum medium tantum constrictis, utrinque subacutiusculis, 22-24 \times 6, loculo tertio supero vix crassiore, loculis omnibus grosse 1-guttulatis.

Hab. ad corticem ætustiore *Coffeæ arabicæ* prope Orán Jujuy Argentina, America austr.

4. *Lophiotrema vagabundum* Sacc. — Syll. II, p. 684 et IX p. 1081 5175

— var. *Hydrolapathi* Sacc., Ann. Myc. III (1905) p. 232, Syd. Myc. Germ. n. 322. — A typo sat ludibundo præcipue dignoscitur peritheciis paullo majoribus, nempe 0,3-0,5 mm. diam. et magis prominulis, ostiolo minus compresso.

Hab. in caulibus emortuis Rumicis *Hydrolapathi*, Wannsee prope Berolinum Germaniæ (SYDOW).

5. *Lophiotrema ? paspalicola* Spegazz., Anal. Mus. Nac. Buenos Aires 5176

t. XIX (1909) p. 430. — Peritheciis laxè gregariis innato-erumpentibus, 150-180 μ . diam., ostiolo lineari vix papillato præditis; ascis cylindraceo-subclavulatis, basi longè sensimque attenuatis, in pedicello modice elongato productis, 90-100 \times 10-11, 4-8-sporis, paraphysatis; sporidiis fusoideis, sæpius distichis, utrinque acutatis, 3-septatis, ad septa, ad medium validius, constrictulis, loculo secundo supero tumidiore, 22 \times 5,5-6, primo hyalinis serius leniter chlorinis.

Hab. ad culmos dejectos putrescentes *Paspali* cujusdam pr. Tucumán Rep. Argentina America austr. — Species ostiolo obscure lophiostomopideo ad *Leptosphaeriam* vergens; *Lophiostomati culmifrago* Speg. peraffine.

6. *Lophiotrema Arundinariæ* Rehm, Ann. Mycol. V (1907) p. 532. — 5177

Peritheciis gregariis primitus epidermide denigrata tectis, dein liberis, globulosis, glabris, atris, nitentibus, ostiolo compresso cristato brevissimo, poro perspicuo pertusis, 0,5 mm. diam., subcarbonaceis; ascis clavatis, apice rotundatis, 80-85 \times 10-12, octosporis; sporidiis fusiformibus, rectis, hyalinis, strato mucoso tenui obductis, 3-septatis, haud constrictis, 18-20 \times 3,5-4, distichis; paraphysibus filiformibus.

Hab. in *Arundinariæ* culmo, São Leopoldo, Rio Grande do Sul, Brasilæ (RICK). — *Lophiotr. culmifrago* proximum.

VIVIANELLA Sacc. — Syll. II, p. 687 ut subg. *Lophiotrematis*; XIV, pag. 27 (Etym. a DOMINICO VIVIANI, Bot. prof. genuensi et claro mycologo). — A typo dignoscitur sporidiis utrinque appendiculatis. Ad hoc genus sunt referendæ: *Viv. Sedi* (Fuck.) Sacc. — *Viv. affinis* (Speg.) Sacc. — *Viv. cristata* (H. Fabr.) Sacc. — *Viv. angustilabra* (B. et Br.) Sacc. — *Viv. Winteri* Sacc. — *Viv. aucta* Sacc. (Cfr. Syll. II, pag. 687-688) — *Viv. magellanica* (Speg.) Sacc. — *Viv. australis* (Speg.) Sacc. — *Viv. leucospora* (Nitschke) Sacc. (Cfr. Syll. IX, p. 1079).

1. *Vivianella chilensis* Speg., Fungi Chilenses (1910) pag. 101, cum 5178 icon. — Peritheciis laxè gregariis ligno denudato plus minusve infossis, coriaceo-subcarbonaceis, ostiolo lineari angustissimo præditis, subglobosis, 200-250 μ . diam.; ascis cylindræis, breviter pedicellatis, dense paraphysatis, 120 \times 15-18; sporidiis subfusoides, 5-septato-constrictulis, subtorulosis, loculo mediano supero non v. leniter crassiore, utrinque appendice mucosa anguiformi acuta auctis, submajusculis, hyalinis, 30-35 \times 10-12.

Hab. in ramis siccis *Eugeniæ obtusæ*?, in silvis Cerro Caracol de Concepcion Chile Amer. austr.

Sect. 4. Phæophragmiæ.

LOPHIOSTOMA Ces. et De Not. — Syll. II p. 689, IX p. 1083, XI p. 383, XIV p. 702, XVII p. 886.

1. *Lophiostoma xerophilum* Spegazz., An. Mus. Nac. Buenos Aires 5179 t. XIX (1909) pag. 432, cum icon. — Peritheciis laxè gregariis, parvis, semixertis, subglobosis 250-400 μ ., eximie lineari ostiolatis non nitentibus, ostiolo apicè compresso-truncato; ascis cylindræis, brevissime pedicellatis, 150 \times 18-20, octosporis, paraphysatis; sporidiis ellipsoideis, fumosis, oblique monostichis, septis 5 crassis nigris variegatis, 25-30 \times 12-14, loculis sæpius dense guttulatis.

Hab. ad partem internam corticis durioris *Larrea divaricata*, Cacheuta prope Mendoza, Argentina America austr.

2. *Lophiostoma andicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 5180 (1909) pag. 431. — Peritheciis densissime gregariis, plus minusve matrice immersis, carbonaceis, e globoso compressis, 150-250 μ . diam.; ascis clavatis deorsum longe sensimque angustatis, p. spor. 110-120 \times 14-16, pedicello 25-30 \times 5, octosporis, dense paraphysatis; sporidiis distichis subfusoides 5-septatis utrinque acutiusculis, 28-30 \times 7-9, pallide olivæis, loculis minute 1-guttulatis.

Hab. ad truncos ramosque denudatos Patagonii pinifolii, Puente del Inca, prope Mendoza, Argentina Amer. austr. — *L. macrostoma* De Not. affinis species sed certe distincta.

3. *Lophiostoma triseptatum* Peck — Syll. II, p. 691. — var. *diagonale* Fairm., The Pyren. of Orleans County, (Proc. Rochest. Acad. (1905) p. 186). — Sporidiis $17 \times 6,7$, oblique triseptatis. In truncis Salicis, Orleans County Amer. bor. — Var. *acutum* Fairm. l. c. — Sporidiis monostichis, triseptatis, $20 \times 6-7$ utrinque acutis. In ramis decorticatis Aceris, Orleans County Amer. bor. — Var. *pluriseptatum* Fairm. l. c. p. 185. — Ascis p. sp. $70-75 \times 10-12$; sporidiis distichis v. oblique monostichis, oblongis v. clavato-oblongis, obtusis, initio 3-septatis, demum 4-5-septatis, ad septa constrictis, brunneis, $15-20 \times 5-6$. In truncis Aceris, Lyndonville Amer. bor. 5181

4. *Lophiostoma præandinum* Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 433. — Peritheciis laxè gregariis, matrice nigrefacta infossis, subglobosis, $200-300 \mu$. diam., carbonaceis; ascis e fusoides clavulatis deorsum breviuscule pedicellatis, $130-150 \times 18-22$, octosporis, paraphysatis; sporidiis subfusoides, utrinque obtusiusculis, oblique distichis, $35-40 \times 9-11$, 5-6-septatis, ad septa, ad medium vix validius, constrictulis, fuliginis, loculis 2 intimis leniter obscurioribus et sæpius grosse guttulatis. 5182

Hab. ad ramos decorticatos et emortuos Larreæ nitidæ, Cacheuta, prope Mendoza, Rep. Argentina America austr.

5. *Lophiostoma imperfectum* Ellis et Fairm. in Fairm. The Pyren. of Orleans County, in Proc. Rochest. Acad. (1905) pag. 187. — Peritheciis superficialibus, sparsis in areis denigratis, hemisphaericis, dein collabescentibus, vix $0,5$ mm. diam., ostiolo leviter compresso, minuto; ascis clavato-cylindraceis, stipitatis, paraphysatis, $40-50 \times 6-8$; sporidiis monostichis, v. sursum distichis, oblongo-ellipsoideis, utrinque acutulis, 3-septatis, leviter constrictis, rectis v. curvulis, $12-18 \times 6-7$, brunneis. 5183

Hab. in caule emortuo Asclepiadis sp.?, Lyndonville N. Y. Amer. bor. — Sporidia in multis ascis imperfecte evoluta.

6. *Lophiostoma macrostomum* (Tode) Ces. et De Not. — Syll. II, pag. 700 — var. *septem-septatum* Sacc. ap. Berl. Ic. fungor. I, p. 14, t. 8, f. 8. — Dignoscitur sporidiis 7-septatis, $40-45 \times 9-11$; peritheciis sparsis $0,5$ mm. diam. 5184

Hab. in cortice Salicis sp. in collibus Euganeis Ital. bor. — Extat quoque var. americana sporidiis 9-septatis (ELLIS).

7. *Lophiostoma humile* Speg., An. Mus. Nac. Buenos Aires t. XIX 5185 (1909) p. 431, cum icon. — Peritheciis laxè gregariis matrice immersis, carbonaceis, subglobosis, 120-150 μ . diam., ostiolo lineari tenuissimo acuto ægre perspicuo tantum exerto; ascis cylindraceis breviuscule pedicellatis, 70-90 \times 9-12, tetrasporis, paraphysatis; sporidiis oblique monostichis, cylindraceis v. obsoletissime subbiconoideis, utrinque obtusis, 20-22 \times 7-9, 3-septatis, loculis 2 intimis obscurioribus, omnibus grosse 1-guttulatis.

Hab. ad ramos emortuos dejectos *Casuarinæ* equisetifoliæ, Claypole, prope Buenos Aires Argentina America austr. — *L. quadrinuclato* Karst. cognatum; tunica ascorum jodi ope lenissime cærulescit.

8. *Lophiostoma Ephedræ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 5186 p. 330, tab. VIII, fig. 3 — Peritheciis epidermide tectis, globosis, nigris, 400-600 μ . diam., ostiolo 210-230 \times 140-180 epidermidem perforante, dein superficialibus; ascis cylindraceis, longe stipitatis, 90-100 \times 16-20 (parte sporifera); paraphysibus filiformibus, septatis, ramosis; sporidiis monostichis aut sursum inordinate distichis, oblongo-ellipsoideis, cylindraceis, initio hyalinis, 1-septatis, dein ochraceis 3-septatis, demum atro-brunneis, asperulis, aculeolatis, ad septa constrictis, 18-26 \times 8-10, plerumque 24 \times 9, loculis sæpe inæqualibus.

Hab. in ramulis siccis *Ephedræ distachyæ* prope Kecs-kémét Hungariæ. — Socia adest *Wojnowicia Ephedræ* quæ probabiliter ejus status pycnidicus.

Sect. 5. Hyalodictyæ.

LOPHIDIOPSIS Berl. — Syll. IX, p. 1093.

1. *Lophidiopsis chilensis* Speg., Fungi Chilenses (1910) p. 102, cum 5187 icon. — Peritheciis laxè gregariis ligno denudato omnino immersis globosis parvulis, ostiolo minuto angusto vix exerto, 120-150 μ . diam.; ascis e clavato subsaccatis breviuscule attenuato-pedicellatis, paraphysatis, 100-110 \times 16-18; sporidiis distichis ellipsoideis utrinque rotundatis hyalinis mediocribus, transverse 3-septato-constrictulis, loculis 1 v. 2 centralibus septo altero verticali divis, 18-22 \times 9-10.

Hab. in ramis siccis putrescentibus *Treyoæ* trinervis in collibus S. Bernardo prope Santjago Chile Amer. austr. — Forsan *Sphaeria angustata* Pers. huc pertinet.

Sect. 6. Phæodictyæ.

PLATYSTOMUM Trev. — Syll. II p. 716, IX p. 1091, XIV p. 706, XVI p. 653 (sub *Lophidium*), XVII p. 889 (sub *Platystomum*).

1. *Platystomum argentinense* Spegazz., An. Mus. Nac. Buenos Aires 5188 t. XIX (1909) p. 434, cum icon. — Peritheciis tota matrice immersis subglobosis 250-300 μ . diam., carbonaceis, ostiolo angustissimo vix indicatis; ascis subcylindraceis abrupte graciliterque pedicellatis, parte sp. 110-120 \approx 25-30, pedicello 30 \approx 5, octosporis, aparaphysatis v. paraphysibus parcissimis commixtis; sporidiis oblique mono- v. distichis, ellipsoideo-elongatis, 11-14-septato-muriformibus, olivaceis, 35 \approx 12.

Hab. ad lignum induratum trunci cariosi *Duvauæ longifoliæ*, Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr. — *P. thyridoidi* (Sacc.) affine, ascis caudiculato-stipitatis sporidiisque paullo minoribus tamen recedens.

2. *Platystomum muriforme* (Hazl.) Sacc. et Trav. — Syll. XX p. 428 5189 — *Lophiostoma muriforme* Hazsl. Sphær. Hung. pag. 84, t. V, fig. 18. — Peritheciis . . . ; ascis cylindraceis apice rotundatis deorsum tenuato-stipitatis, filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, coloratis, utrinque rotundatis, 7-septatis, non constrictis, septis (ut videtur) ternis crassioribus, loculis 3-4 longitrorsum partitis.

Hab. in . . . in Hungaria.

Sect. 7. Scolecosporæ.

LOPHIONEMA Sacc. — Syll. II p. 717, IX p. 1094.

1. *Lophionema Bambusæ* von Höhnelt, Stzb. k. Ak. d. Wiss. Wien 5190 CXVIII, Abt. I (1909) p. 323, cum icon. — Peritheciis gregariis, quandoque binis approximatis, nigris, subopacis, profunde immersis, hemisphærico- v. semiovoideo-prominentibus, parietibus parenchymaticis firmis 60-90 μ . cr. pluristratosi præditi, 0,5-1 mm. latis, 500-700 μ . altis, collo nullo, ostiolo compresso et rimoso donatis; ascis cylindraceis usque ad 300 μ . long., supra rotundatis ad 10 μ . latis, basi 8 μ ., tunica apice usque ad 4 μ . cr., J -, non pedicellatis, octosporis; paraphysibus numerosissimis, 1 μ . cr., su-

pra ramoso-reticulatis, ascos superantibus; sporidiis fasciculatis, hyalinis, filiformibus, utrinque obtusis, multiseptatis, $300 \times 1,8$, articulis 6-10 μ . longis.

Hab. in vaginis siccis putrescentibus *Bambusæ* sp. in Horto Bot. Buitenzorg in ins. Java.

Fam. 12. Hemhysteriaceæ.

PARMULARIA Lév. — Syll. II p. 661, XI p. 387, XIV p. 708, XVI p. 657.

1. *Parmularia dimorphospora* R. Maire, Ann. Mycol. VI (1908) p. 149, 5191 fig. 5, tab. I, fig. 4. — Stromatibus plus minusve regulariter sub-orbicularibus, crustaceis, nigris, 0,5-2 mm. diam., mæculæ brun. neolæ sæpe obsoletæ insidentibus, contextu microthyriaceo; peritheciis linearibus, pariete proprio destitutis, e centro stromatis plus minusve regulariter irradiantibus, rima angustissima dehiscentibus; ascis octosporis, junioribus ovoideo piriformibus, maturis oblongo-cylindræis, sessilibus, $22-25 \times 8-9$, crasse tunicatis, apice univoelatis, gelificatione dehiscentibus; sporidiis oblongo-cylindræis, $11-14 \times 4$, distichis, maturis episporio dilutissime brunneo et minutissime verruculoso præditis, guttulis oleosis lutescentibus fartitis, ad medium septatis, vix constrictis, cellula superiore paulo latiore, inferiore paulo angustiore et sæpius evidenter longiore; paraphysibus filiformibus, simplicibus vel parce ramosis, apice in-crassatulis, contentu oleoso lutescente fartitis; sporis secundariis filiformibus, curvatis, utrinque acutis, levibus, continuis, guttulis oleosis lutescentibus fartitis, $15-25 \times 1,5-2$, in sporophoris subhyalinis, cylindræis, fasciculatis, circ. $10-15 \times 1-1,5$, ascis immixtis, solitarie acrogenis.

Hab. in foliis vivis *Myrtaceæ* cujusdam, Mondagui pr. Sao Paulo, Brasilia. — Sporidiis tenuiter verruculosis, sporulisque septorioideis inter ascos mixtis prædistincta species et a typo desciscens.

2. *Parmularia Hymenolepidis* P. Henn., Hedw. XLVII (1908) p. 261. 5192 — Stromatibus hypophyllis, sparsis, crustaceo-membranaceis, atris, dimidiato-scutellatis, 5-6 mm. diam., loculis radiato-plicatis, ramosis, longitudinaliter rimoso-dehiscentibus; ascis clavatis, obtusis, 8-sporis, $28-35 \times 6-7$, paraphysibus copiosis, ascos superantibus,

apice conglutinatis, clavatis, flavo-brunneis; sporidiis subdistichis, oblonge ovoideis, 2-guttulatis, medio 1-septatis, flavo-fuscidulis, $10 \approx 3-3,5$.

Hab. in foliis *Hymenolepidis* spicatae, Mindanao, Mt. Apo, 2000 m. alt., in ins. Philippin. (COPELAND). — *Parm. discoideæ* affinis, sed distincta.

3. *Parmularia reticulata* Starb., Ascom. Schwed. Chaco-Cordill. Ex-5198 ped., Arkiv. f. Bot. Bd V (1905) pag. 6, fig. 5. — Stromatibus epiphyllis, gregariis, interdum nonnullis confluentibus, facile secedentibus, fere membranaceis, ob perithecia elongata e centro communi radiantia, apicibus exterioribus plus minusve distantibus stellulatis, circ. 1 mm. diam.; peritheciis apicibus centralibus mutua pressione compressis angustioribus, apicibus excentricis latioribus, obtusis, $\frac{1}{4}-\frac{1}{2}$ mm. longis, circa 0,1 mm. latis, denique longitudinaliter rimose dehiscentibus, totis reticulo chordis mycelialibus anastomosantibus in hyphas 3,8-6,5 μ . crassas, circa stromata retiformes transeuntibus, maculas longitudinales formantibus composito circumtextis; ascis ovoideis, sursum magnopere incrassatis, 48-52 \approx 19; sporidiis octonis, conglobatis, medio uniseptatis, constrictulis, cellula superiore interdum sphærioidea vel duabus conicis, primo hyalinis, denique fuligineis, membrana crassiuscula, 16,5-21,5 \approx 7,5-10; paraphysibus filiformibus, flexuosis, septatis, ad septa superiora constrictis, circ. 5 μ . cr.

Hab. in folio humi jacente in rara silva Colonia Risso, Paraguay (MALME). — Peritheciis magis divergentibus, reticulo vestitis distincta species. Etiam *Parm. Styracis* Lév. habet mycelium, cujus chordæ stromata circumdantes in perithecia ascendunt, sed vix sunt anastomosantes et reticulum manifestum non formant (Starb. l. c.).

4. *Parmularia Stigmatopteridis* Ferd. et Winge, Botanisk Tidsskr., 5194 XXIX (1908) pag. 317, fig. 7. — Stromatibus primo simplicibus, punctiformibus, ambitu circulari, habitu fere *Asterinae*, mox autem compositis, margine lobato, denique crustuliformi-confluentibus, plagulas nigras, irregulares, nunc minutissimas, nunc ad 2 mm. elongatas, paginam inferiorem conspurcantes formantibus; peritheciis rimoso-hiantibus, flexuosis, inter se mæandriiformi-sinuatis, lente etiam ægre conspicuis, raro subtectis, e centro sterili radiantibus; ascis sessilibus, juvenilibus saccatis, apice valde incrassatis, maturis plerumque cylindraceo-clavatis, rarius clavatis v. irregularibus, 30-40 \approx 10-13; sporidiis octonis, conglobatis, oblongo-cla-

vatis v. clavatis, un- rarius biseptatis, medio constrictis, 12-15 \times 5-6, griseo-brunneolis.

Hab. ad paginam inferiorem Filicum præcipue Stigmatopteridis nec non Dryopteridis patentis in America trop. et subtropicali.

HYSTEROSTOMELLA Speg. — Syll. IX p. 1098, XI p. 385, XIV p. 708, XVI p. 655, XVII p. 892.

1. *Hysterostomella concentrica* Syd., Ann. Mycol. VII (1909) p. 544. 5195
— Stromatibus epiphyllis, sine maculis, sparsis, orbicularibus, 2-4 mm. diam., planis, crustaceis, atris, totis ex peritheciis concentricè ordinatis compositis; peritheciis in annulos 4-5 concentricè dispositis, dense aggregatis et sæpe confluentibus, subrotundatis subinde ellipticis, e mutua pressione sæpe angulatis, rima latiuscula apertis; ascis cylindraceo-clavatis, apice rotundatis ibique crasse tunicatis, subsessilibus, 45-55 \times 14-18, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 1-septatis, loculo superiore paullo majore, diu hyalinis, tandem fuscis, 14-18 \times 4-5; paraphysibus filiformibus, ascos superantibus, conglutinatis et epithecium flavo-brunneolum formantibus.

Hab. in foliis vivis Trichiliæ emeticæ, Africa or. lusitanicæ (C. W. HOWARD). — Habitus *Hyster. andinæ* Pat.

2. *Hysterostomella elaiocola* Maubl., Bull. Soc. Mycol. France XXIII 5196 (1907) pag. 143, tab. XX, fig. 11-15. — Stromatibus sparsis, epiphyllis, in maculis pallidis, immarginatis insidentibus, irregularibus, lobatis, nigris, carbonaceis, usque ad 1 cm. diam.; peritheciis in quoque stromate numerosis, elevatis, flexuosis intricatisque, rima longitudinali angusta demum apertis; ascis ovoideis, apice rotundatis et hinc tunica crassiore præditis, octosporis, 50-55 \times 15-20; sporidiis in asco inordinatis, primum hyalinis, medio 1-septatis duabus magnis guttulis præditis, demum ellipsoideis, obtusis, medio 1-septatis et lenissime constrictis, eguttulatis, pallide fuscis, 16-17 \times 6.

Hab. in foliis Elæis guineensis Dahomey Guinea Africæ.

*Fam. 13. Hysteriaceæ.**Subfam. 1. Hysteriæ.**Sect. 1. Hyalosporæ.*

SCHIZOTHYRIUM Desm. — Syll. II p. 723, IX p. 1100, XIV p. 710, XVI p. 657, XVII p. 892.

1. *Schizothyrium macrosporum* D'Almeida et Da Camara, Bol. Soc. 5197 Brot. XXIV (1908-1909) Extr. p. 23. — Peritheciis amphigenis, innato-superficialibus, sparsis, primo orbiculatis demumque ellipsoideis, diu convexiusculis dein applanatis, rima longitudinali percursis; ascis dense congestis, claviformibus, longe pedicellatis, 100-150 \times 15-17; sporidiis distichis, oblongo-fusoideis vel subellipsoideis, utrinque rotundatis, continuis, hyalinis, 17-20 \times 5; paraphysibus copiosissimis, filiformibus, ascos superantibus.

Hab. in foliis petiolisque *Hederæ Helicis*, in Horto botan. Coimbra Lusitaniæ (A. MOLLER).

2. *Schizothyrium acuum* Bubák, Fünfft. Beitr. Pilzfl. Tir., in Ber. nat. 5198 turw.-med. Ver. Innsbruck, XXX Jahrg. (1905-1906) Extr. p. 6. — Mycelio subcuticulari, ex hyphis ramosis, crebre septatis, brunneis et plagulas brunneas efficiente constituto; peritheciis gregariis, subcuticularibus, dimidiatis, convexis, nigris v. nigro-brunneis, nitidis, primum rimulosis demum fere omnino apertis, flavido-albis, 100-200 \times 50-70; ascis ovoideis 30-38 \times 22-29, hyalinis, utrinque rotundatis, apice constrictulis, hyalinis, octosporis; sporidiis confertis, elongatis, 13-18 \times 6,5-8, utrinque rotundatis, medio septatis, hyalinis, contentu fortiter refringenti.

Hab. in foliis emortuis *Pini* sp., prope Meran Tirolia (CERNY).

3. *Schizothyrium Jaapii* (Rehm) Sacc. et Trott., *Aporia Jaapii* Rehm 5199 ap. Jaap in Abhandl. Bot. Ver. Brandenb. XLVII (1905) p. 84. — Peritheciis gregariis, plerumque longitudinaliter dispositis, elongatis, rectis, utrinque obtusis, nigris, rima elongata percursis, udis discum dilute flavidum linearem tenui-marginatum ostendentibus, 200-300 \times 100; ascis clavatis apice rotundatis, octosporis, 25-30 \times 10-12; sporidiis fusoideis, rectis v. curvulis, unilocularibus, hyalinis, 15-18 \times 3-4, tristichis; paraphysibus ramosis, conglutinatis, hyalinis.

Hab. in rhachidibus siccis *Aspidii spinulosi*, Sattenfeld prope Oldesloe Schleswig-Holstein, Germania.

4. *Schizothyrium hysterioides* (Hazsl.) Sacc. et Trav. — Syll. XXI 5200 p. 753 — *Aporia hysterioides* Hazsl. Maygar. Discom. p. 194, t. III, f. 7. — Peritheciis ellipsoideis, rima latiuscula hiantibus, nigris; ascis clavatis breviter crasseque tenuato-stipitatis, apice subrotundatis, octosporis; paraphysibus filiformi-clavatis, sursum coloratis; sporidiis distichis, ellipsoideis, utrinque rotundatis, subinde inæquilateris, guttulatis, hyalinis, $10-16 \times 5-6$.

Hab. in foliis languidis . . . in Hungaria.

Sect. 2. Hyalodidymæ.

AULOGRAPHUM Lib. — Syll. II p. 727, IX p. 1101, XI p. 386, XIV p. 711, XVI p. 659, XVII p. 895.

1. *Aulographum valdivianum* Speg., Fungi Chilenses (1910) p. 110. — 5201 Minutissimum, sparsum v. laxè gregarium, lineare v. vix furcatum, utrinque obtusiusculum, glabrum, membranaceum, nigrum, $250-500 \times 40-50$; ascis obqvatis, brevissime pedicellatis, obsolete pseudoparaphysatis, $20-25 \times 10-12$, octosporis; sporidiis ellipsoideis v. biconoideis, non v. lenissime subclavulalis, 1-septato-constrictulis, hyalinis, parvis, $8-10 \times 2,5$.

Hab. in ramis siccis *Rubi sancti* prope Ciudad de Valdivia Chile Amer. austr. — Observante cl. Spegazzini l. c. genus *Aulographum* ad *Hemhysteriaceas* propius accedit.

2. *Aulographum Chusqueæ* Speg., Fungi Chilenses (1910) pag. 109, 5202 cum icon. — Minutum, hinc inde pauci-gregarium ($3-10$) lineare v. furcatum, utrinque obtusum, glabrum, membranaceum, nigrum, $600-1000 \times 30-80$; ascis ovoideis, brevissime crasseque pedicellatis, aparaphysatis, $25-28 \times 14-18$, octosporis; sporidiis conglobatis, elliptico-didymis, hyalinis, parvis, $10-12 \times 3-4$.

Hab. in culmis siccis et plus minusve putrescentibus *Chusqueæ valdiviensis* prope Bahía de Corral Chile Am. austr.

3. *Aulographum donacicola* Spegazz., An Mus. Nac. Buenos Aires 5203 t. XIX (1909) p. 441. — Peritheciis superficialibus plus minusve gregariis, atris, subellipsoideis, $150-200 \times 75-100$, rima angustissima dehiscentibus, margine vix denticulato-repandulis; ascis subcylindraceis, supra subtruncato-rotundatis crassissimeque tunicatis, basi abrupte cuneatis, pedicello brevissimo nodulosoque suffultis, $30-$

35 \times 12, octosporis, aparaphysatis; sporidiis distichis v. subconglobatis, 10-12 \times 5-6, medio 1-septatis, non vel leniter constrictulis, hyalinis, loculis grosse 1-guttulatis.

Hab. ad culmos dejectos putrescentes Arundinis Donacis in sepibus Lezama, prope Buenos Aires America austr.

GLONIUM Mühl. — Syll. II p. 731, IX p. 1102, XI p. 386, XIV p. 711, XVI p. 661, XVII p. 896.

1. *Glonium uspallatense* Speg., An. Mus. Nac. Buenos Aires t. XIX 5204 (1909) p. 436, cum icon. — Peritheciis sparsis v. laxè gregariis, erumpentibus, lineari-ellipticis vix convexulis, 250-500 \times 100-150; ascis clavatis apice crasse tunicatis, basi sensim attenuatis, pedicello brevissimo suffultis, octosporis, paraphysatis, 100 \times 20; sporidiis obovato-didymis, conglobatis, 20-22 \times 10-11, medio 1-septatis, loculis inæqualibus.

Hab. ad ramos vetustiores emortuos decorticatos Bulnesiæ Retamo in præandinis Uspallata prope Mendoza, Argentina America austr.

2. *Glonium araucanum* Speg., Fungi Chilenses (1910) pag. 110. — 5205 — Peritheciis sparsis, longitudinalibus, subsuperficialibus, lineari-bus, utrinque obtusiusculis, parvis, 0,5-1,5 mm. long., 0,25-0,35 mm. lat., rima angusta impressa percursis, atris, carbonaceis; ascis cylindræis, breviuscule pedicellatis, non v. parcissime paraphysatis, 100-110 \times 18-20; sporidiis mono- v. distichis, mediocribus, elliptico-biconoideis, hyalinis, ad medium 1-septato-constrictulis, primo tunica mucosa tenui vestitis, dein nudis, 20-24 \times 8-10.

Hab. in sarmentis siccis et subputridis Lardizabalæ in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

3. *Glonium chilense* Speg., Fungi Chilenses (1910) p. 111. — Sparsum, parvum, e ligno denudatò erumpens, plus minusve infossum, e cinereo atrum, carbonaceum, glabrum, lineare, utrinque acutum, rima ægre perspicua dehiscens, 1-1,5 mm. long., 0,300-0,350 mm. lat.; ascis subcylindræis breviter pedicellatis, paraphysatis, 60-70 \times 10-12, octosporis; sporidiis mono- v. distichis, clavulato-didymis, hyalinis, subparvis, 15-16 \times 7-8.

Hab. in ramis siccis *Cryptocaryæ*? in silvis Cerro Caracol de Concepcion Chile Amer. austr. — *Gl. lineari* affine.

4. *Glonium valdivianum* Speg., Fungi Chilenses (1910) pag. 114. — 5207 Peritheciis gregariis, erumpenti-superficialibus, minutis, atris, utrinque obtusiusculis, leniter rimosis, atris, 0,3-1 mm. long., 0,15-

0,25 mm. lat. et alt.; ascis cylindraceis breviter pedicellatis, paraphysatis, 45-50 \times 6-7; sporidiis clavulatis, didymis, hyalinis, parvis, 8 \times 3.

Hab. in ligno vetusto denudato Perseæ Lingue prope Ciudad de Valdivia, Chile Amer. austr. — *Glon. microsporo* Sacc. affine a quo differt ascis et sporidiis minoribus.

5. *Glonium microsporum* Sacc. — Syll. II, p. 736 — var. *palmicola* 5208 Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 407. Ascomatibus ellipticis v. interdum fere globosis, rima tenuissima dehiscentibus, carbonaceo-duris; ascis cylindraceis gracilibus, pedicellatis, p. sp. 52-60 \times 5,5, pedicello c. 12-15 \times 2,5; paraphysibus dense constipatis ascos superantibus, tenuibus; sporidiis hyalinis, rectis v. oblique monostichis, ad septum non v. vix constrictis, utrinque acutatis v. etiam rotundatis, cellula inferiore sæpe paullo angustiore, quaque cellula 1-guttata, 9-10,5 \times 3-3,5.

Hab. in ligno Palmarum, Rio Grande do Sul Brasiliæ. — Var. *minus* Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) p. 130. — Peritheciis 0,25-0,50 \times 0,20-0,25; ascis 40-50 \times 4; sporidiis 7-8 \times 3-4. — Vulgatum in disco sectionum ramorum truncorumque in Matto Queimado et San Pedro Rep. Argentina in America australi.

6. *Glonium Chusqueæ* Speg., Fungi Chilenses (1910) pag. 112, cum 5209 icon. — Peritheciis laxè gregariis, erumpentibus, linearibus, angustis, utrinque subacutiusculis, carbonaceis, rima ægre perspicua dehiscentibus, 0,5-1 mm. long., 90-100 μ . lat. et alt.; ascis ex obovato ellipsoideis, abrupte graciliterque pedicellatis, aparaphysatis, 30-40 \times 12; sporidiis cylindraceo-ellipsoideis parvis, hyalinis, sæpius grosse 4-guttulatis, ad medium 1-septato-constrictulis, 13-14 \times 4.

Hab. in ramulis siccis Chusqueæ valdiviensis, Bahia de Carracol Chile Amer. austr.

7. *Glonium Cumingii* Speg., Fungi Chilenses (1910) p. 113 cum icon. 5210 — Maculis ellipticis indeterminatis cinerescentibus; peritheciis laxè gregariis, erumpenti-subsuperficialibus, parvis, linearibus, utrinque acutiusculis, rima angusta dehiscentibus, subcarbonaceis, 0,3-1,5 mm. long., 0,1-0,25 mm. lat. et alt.; ascis ovoideis v. ellipsoideis, sessilibus v. brevissime crasseque pedicellatis, pseudoparaphysibus subcoalescentibus obvallatis, 40-50 \times 20-30; sporidiis conglobatis subclavulatis submediocribus, hyalinis, 1-septato-constrictulis (an postremo 3-septatis et fumosis?), 20-24 \times 6-7.

Hab. in culmis emortuis putrescentibus Chusqueæ Cumin-

gii, Cerro Caracol de Concepcion, Cerro Alegre de Valparaiso, Chile Amer. austr. — An *Glonii Chusqueæ* Speg. forma?

ACTIDIUM Fr. — Syll. II p. 738.

1. *Actidium pulchellum* Rick, Broteria IV (1905) p. 161. — Stromati- 5211
bus (peritheciis?) primitus nigris, *Asterinæ* formam imitantibus cum 3-4 radiis, dein dehiscentibus ad modum *Hysterii* et discum pallidum exhibentibus; ascis 100-125 × 8-10; sporidiis octo, filiformibus 60-75 × 1, non septatis (uti videtur); paraphysibus paucis, versus apicem 3 μ . latis, non ramosis, ex ascis abortivis reductis.

Hab. in foliis cujusdam arbusti incogniti, Torres Vedras Lusitaniæ. — Vix *Actidii* species, nam sporidia non hyalodidyma, sed filiformia. Potius *Coccomycetis* sp.

Sect. 3. Phæodidymæ.

LEMBOSIA Lév. — Syll. II p. 741, IX p. 1104, XI p. 387, XIV p. 712, XVI p. 663, XVII p. 897.

1. *Lembosia Dipterocarpi* P. Henn., Hedwigia XLVII (1908) p. 261. 5212
— Maculis mycelii epiphyllis, rotundatis, atro-crustaceis, sparse gregariis, ca. 2 mm. diam.; peritheciis gregariis, linearibus, flexuosis, atris, sæpe anastomosantibus v. ramosis, longitudinaliter rimoso-dehiscentibus; ascis ovoideis vel ellipsoideis, 40-55 × 30-40, 8-sporis, obtusis; sporidiis conglobatis, ellipsoideis v. ovoides, medio 1-septatis, constrictis, intus granulatis, atris, 26-30 × 16-20.

Hab. in foliis *Dipterocarpi grandiflori*, Luzon, Prov. Bataan, Lamac ins. Philippin. (COPELAND).

2. *Lembosia Erythrophlæi* P. Henn., Engl. Jahrb. XXXVIII (1905) 5213
p. 115. — Peritheciis superficialibus sparsis, dimidiato-scutellatis, ellipsoideo-oblongis, atro-fuscis, 350-450 × 200-250, longitudinaliter rimoso-dehiscentibus, contextu celluloso, atro-castaneo, hyphis radiatim circumdatis atro-fuscis, pseudopodiis subovoideis, alternantibus, 15-18 × 10-14; ascis ovoideis v. ellipsoideis, apice tunicatis, octosporis, 50-70 × 40-50; sporidiis conglobatis, ellipsoideis v. ovoides, 2-guttulatis, medio 1-septatis, constrictis, atris, 30-35 × 12-18.

Hab. in foliis *Erythrophlæi guineensis*, Dar-es-Salâm Zanzibar Africæ (HOLTZ).

3. *Lembosia congregata* Syd., Ann. Mycol. VIII (1910) pag. 40. — 5214
Hypophylla, maculis indistinctis vel subnullis insidens; peritheciis
Syll. fung. XXII (XI-1912)

innato-superficialibus, carbonaceis, in greges orbiculares atros subiculo radiante fibrilloso ex hyphis obscure brunneis denseque intertextis composito circumdatos, 3-5 mm. latos dense confertis, subinde confluentibus, primitus globulosis, dein ellipticis vel angulatis, ca. 300-500 μ . longis, atris, rima longitudinali dehiscentibus; ascis late clavatis, apice rotundatis incrassatisque, 45-60 \times 24-32, 2-4-sporis; sporidiis distichis, ellipsoideo-oblongis, utrinque rotundatis, medio valde constrictis, primo hyalinis, tandem obscure brunneis, 26-32 \times 13-18; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in foliis *Rhododendri* spec., Banajao, provincia of Laguna, Luzon, ins. Philipp. (C. B. ROBINSON). — *Lemb. Albersii* affinis sed sporidiis crassioribus in asco binis v. quaternis mox dignoscenda.

4. *Lembosia Drymidis* Lév. — Syll. II, p. 743, IX, p. 1105 — var. 5215
baccharidicola Rähm., Ann. Mycol. V (1907) p. 532; VII (1909) p. 407. — Maculis mycelii epiphyllis, orbicularibus, haud rite conspicuis, fusco-nigritulis, 2-4 mm. diam.; hyphis mycelium tenuissimum formantibus, subramosis, fuscis, 5 μ . crassis, ex basi peritheci centrifugaliter repentibus; peritheciis primitus semiglobosis, 2-6 in centro mycelii arcte adnatis, rimis trigonis apertis, 0,1-1,5 mm.; ascis ovoideo-globosis, 40 \times 30, octosporis; sporidiis oblongis, utrinque rotundatis, primitus hyalinis, dein fuscis, medio septatis et subconstrictis, utraque cellula sæpe 1-guttata, 18-20 \times 9-10.

Hab. in foliis *Baccharidis* vivis, Nossa Senhor, Sao Paulo Brasiliæ (USTERI). — A typo differt peritheciis epiphyllis dispersis, sessilibus in maculis late diffusis nigro-fusciculis, primitus hemisphæricis, clausis, dein fere semper 3-4-gonis, rarissime sublongatis.

5. *Lembosia Coccolobæ* Earle, Bull. of the New York Bot. Gard. 5216
 (1904) pag. 301. — Epiphylla; maculis brunneis, primum sæpe stellatis, dein orbicularibus, 4-6 mm. v. confluentibus et subeffusis; mycelio sparso, fusco, mox late effuso, hyphis continuis vel sparse septatis, hinc inde subramosis et anastomosantibus, angustis, 3-4 μ . cr.; hyphopodiis sessilibus, ovoideis, obscure fuscis, parvis, circ. 7 \times 5; ascomatibus sparsis, discretis, nigris, linearibus, rectis v. curvulis, apice obtusis, 300-600 \times 100, subiculo angusto, ex filis mycelialibus 15-40 μ . long. constituto; ascis ellipsoideis 35 \times 20; sporidiis inordinatis, curvatis, inæqualiter uniseptatis, hyalinis, 16 \times 7.

Hab. in foliis vivis *Coccolobæ* uviferæ, Porto Rico Amer. centr. (HELLER).

6. *Lembosia microtheca* Theiss., Beih. Bot. Centralbl. Bd. XXVII 5217

(1910) Abt. II, p. 411. — Maculis epiphyllis vix perspicuis, lenissime fuliginascentibus, minutis, 2-4 mm. diam., indeterminatis; mycelio vix sub lente visibili, ex hyphis sparsis, laxè oppositoramosis, læte fuliginèis, 2,5 μ . cr. composito; hyphopodiis raris, alternis, ramuliformibus, estipitatis, rectis, cylindræis, 5-8 \times 2; peritheciis densiuscule aggregatis, aterrimis, linearibus, rectis vel curvulis, dimidiato-convexis, contextu brunneo subconcentrice radiante, rima tenuissima dehiscentibus, longitudinè variabilibus, 180-300 \times 70-90; ascis oblongo-ellipsoideis, 25-30 \times 9-11, interdum deorsum paullo angustatis et proinde subclavatis, 8-sporis; sporidiis demum brunneis, distichis, oblongis, 9-10 \times 2,5-3, loculo inf. paullo angustiore et longiore; paraphysibus copiosis simplicibus filiformibus flexuosis, ascos obvallantibus.

Hab. in foliis *Gœppertiae hirsutæ*, Sao Leopoldo Rio Grande do Sul Brasilæ.

7. *Lembosia Rolfsii* W. T. Horne, Bull. Torr. Bot. Cl. (1905) p. 69, 5218

cum icon. — Maculis 1-2 cm. long. caulem plus minus ambientibus, e flavo-brunneo demum nigricantibus; hyphis continuis atrobunneis, parce ramosis, haustoriis brevibus hinc inde præditis; peritheciis irregulariter sparsis, oblongis, simplicibus v. furcatis v. triradiatis, sæpe curvis, 350-1000 \times 160, nigris, latiuscule sulcatorimosi; ascis late clavatis v. elongato-ovatis, basi obtuse tenuatis, 20-40 \times 8-15, apice dehiscentibus; paraphysibus copiosis, septatis, apice obtusis; sporidiis suboëtonis, biseriatis vel inordinatis, oblongo-ellipsoideis, constricto-1-septatis, utrinque obtusulis, hyalinis, 2-guttatis v. demum minute 2-4-guttulatis, nigricantibus, 10-16 \times 4-5.

Hab. in caulibus adhuc viridibus *Vanillæ planifoliæ*, Miami Fla. Amer. bor. (ROLFS).

8. *Lembosia Saccardoana* Bacc., Funghi Eritr., Ann. Bot. IV (1906) 5219

p. 275, tab. X, fig. 7. — Epiphylla; maculis ellipticis rubiginosis, sæpe longitudinaliter seriatis, 5-7 mm. longis, et 2-3 mm. latis; peritheciis rugosis, atris, punctiformibus vel ellipticis, 150-200 μ . latis, sparsis, nigris, superficialibus, subiculo tenui fibrilloso atroviridi insidentibus; ascis ovato-rotundis, 70 \times 42, paraphysatis; sporidiis rotundis, didymis, ad medium leviter constrictis, tandem castaneo-fuscis, 28 \times 14.

Hab. in foliis *Sansevieræ* sp., Mahdet in montibus Marmaroba Erythrææ (PAPPI).

9. *Lembosia pachyasca* Bres., in Rick, Fungi austro-amer. III-IV, 5220 n. 76, Ann. Myc. IV (1906) p. 312. (Nomen nudum).
Hab. in foliis *Myrsines* spec. in Brasilia America austr.
10. *Lembosia similis* Bresad., in Rick Fungi austro-amer. III-IV, 5221 n. 60, Ann. Myc. v. IV (1906) p. 310. (Nomen nudum).
Hab. in Brasilia, America austr.

TRYBLIDIUM Duf. — Syll. II p. 740, IX p. 1103, XI p. 387, XVI p. 662 et 1145.

1. *Tryblidium argentinense* Speg., An. Mus. Nac. Buenos Aires t. XIX 5222 (1909) p. 437. — Peritheciis sæpius laxè gregariis erumpenti-superficialibus tumidis, elongato-ellipsoideis 1-3 mm. long., 0,6-0,8 mm. diam., rima profunda percursis, coffeicoloribus; ascis cylindraceis basi crasse breviterque pedicellatis, 180-200 \approx 15, sæpius tetrasporis, dense paraphysatis; sporidiis monostichis, cylindraceis 1-septatis rectis v. lenissime inæquilateralibus, 36-38 \approx 11-13, primo hyalinis dein flavidis serius opace fuliginis.
- Hab.* ad ramulos emortuos *Heteropteridis* cujusdam in Colle Cerro San Bernardo, Salta, Argentina, America austr.
2. *Tryblidium guaraniticum* Speg. — Syll. IX, p. 1103 — var. *majus* 5223 Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) p. 131. — Ascis 200 \approx 15-20; sporidiis 28-30 \approx 10-12.
- Hab.* vulgatum ad ramos dejectos putrescentes *Illicis* *paraguariensis*, Rep. Argentina Amer. austr.
3. *Tryblidium Elasticæ* Koord., Botan. Untersuch. (1907) pag. 162, 5224 fig. 5. — Ascomatibus coriaceis, patellarioideis, primum hypophloeideis, dein emergentibus, vix 1,5 mm. diam.; marginibus subintegris; subsessilibus, sparsis, glabris, in sicco fuscis; ascis clavatis, 4-6-sporis, paraphysatis, 70 \approx 30; sporidiis oblongatis, utrinque rotundatis, cribroso-muriformibus, leviter coloratis v. hyalinis, 35-35,5 \approx 14-15; paraphysibus copiosis, valde conglutinatis et confluentibus, epithecium crassum, fuscum formantibus.
- Hab.* in cortice vulnerato *Fici elasticæ* prope Karanggajan prov. Kedu, Java (KOORDERS).
4. *Tryblidium Pandani* Patouill., Bull. Soc. Myc. France XXII (1906) 5225 p. 53. — Epiphyllum; sparsum, minutum, vix 0,5 mm. cr.; peritheciis erumpentibus, fusoides, simplicibus v. furcatis, rectis v. curvulis, disco fusco-atris, extus aterrimis; ascis brevibus, 45 \approx

20, octosporis, copiose paraphysatis; sporidiis brunneis, ovoideis, medio 1-septatis constrictisque 15-18 \times 8.

Hab. in foliis Pandani, Rikitea Polynesiae.

Sect. 4. Hyalophragmiæ.

GLIONIELLA Sacc. — Syll. II p. 765, IX p. 1112, XI p. 388, XIV p. 717, XVI p. 666, XVII p. 903.

1. *Gloniella insularis* Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 156. — 5226

Peritheciis gregariis, superficialibus, elongatis, utrinque attenuatis rotundatisque, rectis v. varie curvulis, rima longitudinali tenui sese aperientibus, plerumque bisulcatis, nigris, 1,5-3 mm. long., 0,75 mm. latis; ascis cylindraceis, estipitatis. 125-140 \times 11, octosporis; sporidiis uni-biseriatis, hyalinis, primum uniseptatis, deinde 5-septatis, tertio loculo latiore, singulo loculo guttulado; fusoides, utrinque attenuatis rotundatisque, sed inferiore parte tenuiore, 18-26 \times 6-8; paraphysibus paulo longioribus quam ascis, ramosis, massa gelatinosa agglutinis.

Hab. in vetusto cortice ignoto, Ile des Pins Nova Caledonia (Le RAT). — *Gl. pseudocommæ* Rehm affinis sed peritheciis atque ascis majoribus, sporidiis hyalinis nec flavidulis, 5-septatis nec 3-7-septatis.

2. *Gloniella araucana* Speg., Fungi Chilenses (1910) p. 115. — Pe- 5227

peritheciis dense gregariis subsuperficialibus, minutis linearibus, rima parum profunda percursis, atris, carbonaceis, 0,3-1 mm. long., 0,15-0,20 mm. lat. et alt.; ascis subclavatis breviter cuneato-pedicellatis, parce pseudo-paraphysatis, 100 \times 20-22; sporidiis fusoides, hyalinis, primo 4-blastis, dein triseptatis, ad medium leniter constrictis, submajusculis, 40 \times 8-10.

Hab. in culmis siccis subputrescentibus Cusqueæ Cumin-gii, Cerro Alegre de Valparaiso, Chile Amer. austr.

MERRILLIOPELTIS P. Henn., Hedwigia XLVII (1908) p. 261 (Etym. a cl. MERRILL). — Perithecia subinnato-superficialia, orbiculari-scutata, longitudinaliter rima angustissima dehiscentia, cornea; asci cylindracei, octospori, paraphysati; sporidia longe fusoides, 3-pluriseptata, hyalina.

1. *Merrilliopectis Calami* P. Henn., l. c. p. 262. — Peritheciis inna- 5228
to-superficialibus, dense gregariis, orbiculari- v. ellipsoideo-scuta-

tis, cocciformibus, brunneis, 1,5 mm. c. longis, 1 mm. latis, longitudinaliter rima angustissima dehiscentibus, contextu corneo brunneo v. fusco; ascis longe cylindraceis, vertice obtuso-rotundatis, 240-260 \times 6-7, 8-sporis, paraphysatis; sporidiis longe fuscoideis, utrinque acutis, hyalinis, primo medio 1-septatis, deinde 3-pluriseptatis subconstrictis, 50-75 \times 4-5.

Hab. in truncis Calami sp., Mindoro, Mt. Halcon, ins. Philippin. (MERRILL).

PSEUDOGRAPHIS Nyl. — Syll. II p. 769, IX p. 1116, XIV p. 717, XVII p. 905.

1. **Pseudographis Orni** Rehm, Contr. Myc. Hung. (Növ. Közl. (1905) 5229 p. 4). — Peritheciis erumpentibus, mox sessilibus, dispersis, primitus globosis, clausis, dein urceolatis, crasse marginatis, demum ex orbiculari hysteriformiter elongatis et discum labiis medio distantibus denudantibus, atris, glabris, subnitidis, 120 \times 25, octosporis; sporidiis ellipsoideis, transverse, 3-5-septatis, quaque cellula guttam 1 magnam includente, ad septa subconstrictis, hyalinis, 30-40 \times 12-15, distichis; paraphysibus filiformibus, apice 3 μ . cr. et cæruleis; epithecium crassum formantibus; hypothecio flavidulo; excipulo crasso, parenchymatico, nigro.

Hab. in cortice Fraxini Orni supra balnea Herculis (Herkulesfürdő) Hungariæ (LOJKA, 1872). — Perithecia exsiccata labiis sæpe arcte conniventibus fere hysterioidea, interdum striatula. An *Cenangellæ Fraxini* propinqua?

2. **Pseudographis intermedia** Rehm, Ann. Mycol. VI (1908) p. 313. 5231 — Peritheciis dispersis, oblongis, sub peridermio verruciformiter elevato clausis, innatis, dein eo longitudinaliter discisso et adherente labiisque vix distantibus apertis, demum super peridermium prominentibus, disco plerumque oblongo, rarius orbiculari plano, margine irregulariter subcrenulato cinctis, postremo fere sessilibus, atris, extus glabris, irregularibus, 1-1,5 mm. longis, 0,5-1 mm. latis; ascis cylindraceis, apice subtruncatis, c. 200 \times 15, octosporis; sporidiis fusiformibus transverse 5-7-septatis, hyalinis, 25-30 \times 6-7, strato mucoso 5-7 μ . lato obductis, 1-stichis; paraphysibus filiformibus, septatis, 2 μ . cr., versus apicem dilutissime fuscidulis, haud incrassatis, scabriusculis; hypothecio fuscidulo; excipulo parenchymatico.

Hab. in cortice Thujæ v. Cupressi sp. (Cedar) in M. Ta-

coma Wash. Amer. bor. (S. A. HARPER). — A. *Pseudogr. pinicola* sporidiis monostichis, Jodo non tinctis, strato mucoso obductis probe dignoscenda.

Sect. 5. Phæophragmiæ.

HYSTERIUM Tode em. — Syll. II p. 743, IX p. 1108, XI p. 387, XIV p. 715, XVI p. 664, XVII p. 907.

1. *Hysterium chilense* Speg., Fungi Chilenses (1910) p. 117. — Pe. 5231
 ritheciis sparsis v. plus minusve gregariis, longitudinalibus, subsuperficialibus, linearibus, utrinque obtusiusculis, parvis, rima angusta impressa percursis, atris, carbonaceis, 0,5-1,5 mm. long., 0,25-0,35 mm. lat. et alt. (in *Lardizabala*?), 0,4-1 mm. long., 0,20-0,30 mm. lat. et alt. (in *Lithræa*); ascis obclavatis brevissime crasseque pedicellatis, densiuscule paraphysatis, 70-80 × 10-16; sporidiis distichis submediocribus, subcylindraceis, 3-septato-constrictulis, fuligineis, loculis duobus interioribus obscurioribus, 16-22 × 5-6.

Hab. in sarmentis siccis vel fere putridis *Lardizabalæ*?, Cerro Caracol de Concepcion, et in ramis *Lithrææ causticæ* Cerro Alegre de Valparaiso, Chile Amer.-austr.

2. *Hysterium graphideum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5232 (1909) p. 438. — Peritheciis 3-5 dense constipatis, linearibus, non v. vix flexuosis 0,5-1 mm. long., 100-150 µ. lat., rima latiuscula dehiscens, matrice leniter dealbata insidentibus, nigris, glabris, opacis; ascis subclavulatis breviter crasseque pedicellatis, 60 × 12, octosporis, dense paraphysatis; sporidiis distichis subcylindraceis, 3-septatis, 20 × 6, ad septa, ad medium validius, subconstrictulis, primo hyalinis dein chlorinis.

Hab. ad truncos cariosos vetustos *Corallo dendri* (*Erythrinæ*) cristagalli, Isla Santjago prope La Plata, Argentina America austr. — Species habitu valde lichenoso sed thallo omnino destituta; jodi ope membrana ascorum lenissime cærulescit.

3. *Hysterium batucense* Speg., Fungi Chilenses (1910) p. 116, cum 5233 icon. — Peritheciis ligno denudato cinerescente innato-erumpentibus linearibus utrinque subacutiusculis, rima tenui impressa percursis, atris, glabris carbonaceis, 0,5-2 mm. long., 0,25-0,30 mm. lat. et alt.; ascis subcylindraceis, breviter cuneato-pedicellatis, parvis, octosporis, 120-130 × 20-25; sporidiis mono-

v. distichis, e cylindraceo subellipsoideis, mediocribus, typice 5-septatis, loculo mediano supero non v. leniter crassiore, fuliginis, 28-32 \times 12-13.

Hab. in ramis siccis Proustiae pungentis in collibus pr. Batuco Chile Amer. austr.

4. *Hysterium pulicare* Pers. — Syll. II, p. 743. — *H. Totaræ Sacc. 5234 subsp. n., Ann. Mycol. VI (1908) p. 554. — A typo differt peritheciis multo minoribus, nempe 700 \times 400 et levioribus, sporidiis tamen non dissimilibus sed paullo brevioribus, nempe 18-19 \times 5,5-6, fuliginis, utrinque vero pallidioribus; ascis 90-100 \times 11.

Hab. in cortice levi Podocarpi Totaræ in Horto bot. Patavino, Jul. 1908 (Aug. NALESSO). — Ambigit inter *H. vulgare* De Not. et *H. pulicare* Pers.

5. *Hysterium samoënsæ* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. 5235 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 131. — Peritheciis superficialibus, arcte gregariis, linearibus, nigris, plerumque curvulis, $\frac{1}{4}$ -1 mm. long., confluyendo usque ad 3 mm. long., 50-120 μ . latis, utrinque acutis, circ. 80 μ . altis, nigris, carbonaceis, rima angusta apertis et discum nigro-brunneum ostendentibus; paraphysibus crassis, firmis, epithecium violaceo-brunneum efformantibus; ascis ovoideis, supra fortiter incrassatis, 32 \times 16, suboctosporis; sporidiis polystichis, diu hyalinis dein olivaceo-brunneis, pellucidis, elongato-clavatis, utrinque rotundatis, 4-5-ocularibus, ad septa non constrictis, cellulis terminalibus plerumque crassioribus, 15 \times 5.

Hab. in ligno indurato, Leolomuenga, Upolu Samoa (RECHINGER).

6. *Hysterium Hoyæ* P. Henn., Hedwigia XLVII (1908) p. 261. — 5236 Peritheciis amphigenis, sparse gregariis, oblongis, rectis v. curvatis, utrinque obtusis, atris, longitudinaliter rimose dehiscentibus, 180-220 \times 80-100; ascis oblongis v. clavatis, 8-sporis, 24-26 \times 10-15; sporidiis subtristichis v. conglobatis, fusoideis v. clavatis, 3-septatis, fuscis 10-14 \times 3-3,5.

Hab. in foliis Hoyæ sp., Mindanao, Davao ins. Philippin. (COPPELAND).

7. *Hysterium Velloziæ* P. Henn., Hedwigia XLVII (1908) p. 269. — 5237 Peritheciis sparsis v. gregariis, superficialibus, elongatis v. linearibus, interdum curvulis, leviusculis, atro-opacis, usque ad 1 $\frac{1}{2}$ mm. longis; ascis clavatis, obtusis, 8-sporis, 120-130 \times 18-20, paraphysibus copiosis, superantibus, filiformibus, hyalinis, ca. 2 μ .

crassis; sporidiis subdistichis, fusoides, 15-20-septatis, fuligineis, 35-50 \times 12-13.

Hab. ad truncum Velloziæ sp., Ouro-Preto, 1400 m. alt. (SCHWAKE 1892).

8. *Hysterium angustatum* Alb. et Schw. — Syll. II, p. 746. — var. 5298
lophioides Rehm, in Rehm et Rick, Broteria V (1906) p. 225. —
 Peritheciis dispersis v. 3-5 gregariis, sessilibus, linearibus, obtusis,
 rectis, raro curvulis, lophioideis non conchiformibus, tenuissime
 transverse striatis, rima angustissima percursis, nigris, basim ver-
 sus fuscescentibus, crasse carbonaceis, 1-3 mm. long., 0,4 mm. lat.,
 1-3 mm. alt.; ascis clavatis, 150 \times 8-9, octosporis; sporidiis cylin-
 draceis, utrinque obtusis, 3-septatis, subconstrictis, cellula secunda
 sæpe sublatisiore, fusciculis, 18 \times 3-3,5, distichis; paraphysibus fili-
 formibus epithecium coloratum non formantibus.

Hab. ad lignum in Brasilia (Doct. Rick S, J.).

9. *Hysterium* ? *Cyperi* Engelh Abhandl. Senckenb. nat. Ges. XXIX 5289
 (1908).

Hab. in pliocæne super. in Germania.

Hysterii species dubiæ sequentes enumeratæ sunt in Sylloge XIX,
 pag. 962: *Hysterium arachnoideum* Schum. — *H. bilabiatum* Tode
 — *H. cæruleum* Tode — *H. candidum* Tode — *H. quadrilabiatum*
 Tode — *H. rameale* (Fr.) Sacc. et Trav., *Xyloma rameale* Fr. Obs.
 mycol. II, t. VIII, f. 6 (sine diagnosi).

TRYBLIDIELLA Sacc. — Syll. II p. 757, IX p. 1110, XI p. 388, XVI
 p. 665, XVII p. 908.

1. *Tryblidiella argentinensis* Spegazz., Anal. Mus. Nac. Buenos Aires 5240
 t. XIX (1909) p. 438. — Peritheciis per corticem erumpentibus
 sæpius ellipsoideis, rima latiuscule hiantе dehiscentibus, primo sub-
 araneosis dein glabratіs; ascis cylindraceis basi cuneato-pedicellatis,
 160-200 \times 10-12, 4-6-8-sporis, paraphysatis; sporidiis e cylindraceo
 subfusoides, subcymbiformibus, 32-40 \times 8-10, 1-2- v. sæpius 3-se-
 ptatis, e ferrugineo fuligineis.

Hab. ad ramulos dejectos putrescentes *Allophylli* cujusdam
 in Parque Roca, Tucumán, Argentina America austr.

2. *Tryblidiella mandanaoensis* P. Henn., Hedwigia XLVII (1908) 5241
 p. 261. — Peritheciis erumpentibus, cæspitosis, subcoriaceis, ob-
 longis, rectis v. curvulis, atris, labiis tumidis levibus, 1-2,5 mm.
 c. longis, 0,3 mm. latis, disco atro-fusco, levi; ascis subclavatis

obtusis, 8-sporis, p. spor. 140-160 \times 17, paraphysibus obvallatis, hyalinis; sporidiis oblongis, subcurvulis, utrinque obtusis, 8-septatis, atro-brunneis v. castaneis, oblique monostichis, 20-30 \times 10-12.

Hab. ad corticem arboris, Mindanao, Zamboanga, San Ramon ins. Philippin. (COPELAND).

3. *Trybliidiella tetraspora* Massee, Kew. Bull. n. 7 (1906) p. 257. — 5242

Peritheciis erumpentibus, alte exertis, ellipsoideis seu subtrigonis, 2-4 mm. lat.; labiis tumidulis, atris, striatulis, intus involutis; disco plano, rufo-fulvescente; ascis cylindraceis, apice rotundatis, tetrasporis, basi attenuato-stipitatis, 250 \times 20, paraphysibus densissimis longioribus, vertice fusco-fuligineis obvallatis; sporidiis monostichis, oblongo-ellipsoideis, utrinque rotundatis, triseptatis, ad septa non v. vix constrictis, brunneis dein atro-fuligineis, opacis, 50 \times 15.

Hab. ad ramos emortuos, Aburi Gold Coast Guinea Africæ occ. (JOHNSON).

HYSTEROPATELLA Rehm, Disc. p. 300 et 367 (Etym *Hysterium* et *Patella*). — Perithecia innato-erumpentia, atra, membranaceo-subcoriacea, oblonga v. lanceolata, demum late aperta, tenuiter marginata; disco subplano sæpe discolori. Asci breviusculi, paraphysibus ramosis apice coloratis obvallati, octospori. Sporidia oblonga v. fuscoidea, pluriseptata, demum brunneola. — Genus inter *Hysteriaceas* et *Phacidiaceas* medium.

1. *Hysteropatella discolor* (Speg.) v. Höhn., Ergeb. Bot. Exp. Süd- 5243
bras. 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907)
Extr. p. 30, *Hysterium discolor* Speg. — Syll. II, p. 747 — var.
coccinea v. Höhn., l. c. — A typo distinguitur disco rotundato,
etiam in sicco aperto, subcoccineo, nec rufo-ferrugineo.

Hab. ad fragmentum ligneum pr. Butantan, Sao Paulo Brasiliæ.

Sect. 6. Hyalodictyæ.

HYSTEROPSIS Rehm (1887) — Syll. IX p. 1118, XVII p. 909 — *Hysteriopsis* Speg. (1906) vix recedere videtur sporidiis amplis et creberrime septatis, denique fumosis (*).

(*) Ecce diagnosim cl. Spegazzini:

Hysteriopsis Spegazz., Micromicetas de las Cacaoyeros, Rev. Facult. Agro-

1. *Hysteropsis brasiliensis* (Speg.) Sacc. et Trott., *Hysteriopsis bra-* 5244

siliensis Spegazz., Micromic. de los Cacaoyeros in Rev. Facult. Agron. y Veterin. La Plata t. II (1906) p. 308, f. E. — Matrice sordide pallescenti-flavescente, corrugato-subtuberculosa; peritheciis crassis, coriaceis duriusculis innato-erumpentibus late linearibus rarius suborbicularibus, 1-4 mm. long., 0,75-1,25 mm. lat., 0,50-0,75 mm. alt., rectis v. flexuosis sæpeque lobulatis, apicibus obtusiusculis, marginibus verticalibus epidermide matricis primo adpressa dein relaxata vestitis, acie acutiuscula albida, disco planiusculo v. concaviusculo, mox aperto pruinuloso-cinereo, per ætatem fuscescente v. nigricante donata; ascis cylindraceis antice subtruncato-rotundatis postice breviuscule crasseque cuneato-pedicellatis $250 \approx 35$, paraphysibus densissimis coalescentibus apice fusco-crustosis obvallatis ac ægre perspicuis; sporidiis rectis distichis cylindraceis subellipticis $60-80 \approx 18-20$, utrinque subattenuato-rotundatis rectis v. lenissime curvulis, sæpius medium versus parcissime attenuatis, primo cribrosis, hyalinis, serius septis horizontalibus 16-24 donatis, ad septa constrictulis, loculis septis verticalibus 1-3 parum manifestis divis, fumosis, postremo corrugatis difformibus atque fuscis.

Hab. in caule Theobromæ Cacao, Bahia de todos los Santos, Brasilia (HEMPFL).

2. *Hysteropsis corticola* (Fr.) Sacc. et Trav. — Syll. XIX, p. 964 — 5245

Hysterium corticola Hazsl. in Verhandl. zool.-bot. Gesell. Wien (1887) pag. 155, tab. 3, f. 7, non *Hyst. lineare* var. *corticola* Fr. Elench. II, pag. 140, quod = *Hysterium* (*Hysteropatella*) *Prostii* Duby. — Peritheciis linearibus, utrinque rotundatis, levibus, in cortice sessilibus, sæpius transverse positis; ascis parce filiformi-paraphysatis, fusoides, utrinque obtuse acutatis, basi breviter tenuato-stipitatis; octosporis; sporidiis distichis oblongo-ellipsoideis, hyalinis, rectis, utrinque obtusulis, initio 1-septatis, mox 3-septatis, denique 7-septatis, $20-24 \approx 9-11$, loculis nonnullis longitudinaliter 1-septatis.

Hab. in ramis corticatis Pruni Padi, Eperies Hungariæ.

nom. y Veter. La Plata t. II (1906) nn. 4-6, p. 308. — Perithecia erumpenti-superficialia, crassa, extus levia, glabra, mox rimose dehiscentia, atque late hiantia, epithecio planiusculo cinereo acute limitato donata; ascis cylindracei dense paraphysati 8-spori; sporidia majuscula, elliptico-cylindracea, primo cribrosa, hyalina dein dense murali-septata, fumosa. — Genus eximium lacunam n. 68 Hysteriearum Tabul. comp. (Syll. XIV, p. 26-27) replens, habitu externo *Colpomatii* simillimum.

GLONIOPSIS De Not. — Syll. II p. 772, IX p. 1116, XIV p. 717, XVII p. 909.

1. *Gloniopsis Lojkæ* Rehm, Ann. Mycol. IV (1906) p. 339. — Peri- 5246
theciis ligno late dealbato innatis, parallele seriatis, dispersis, primum globosis et plane obtectis, dein poro minuto apertis, demum hysteriiformibus, rima longitudinali apertis, utrinque acutatis, labiis crassis medio distantibus discum planum atrum denudentibus, senilibus supra ligni superficiem derasam exstantibus, excipulo crasso carbonaceo, ligno arcte connato, 0,5-2 mm. long., 0,5-2 mm. lat.; ascis clavatis, apice rotundatis, 4-8-sporis, c. 100×15 ; sporidiis ellipsoideis, transverse 3-5, longitudinaliter plerumque 2-septatis, ad septa haud contractis, subhyalinis, 15-18 \times 8-9, distichis; paraphysibus filiformibus, septatis, ad apicem subramosis et fusciculis, epithecium fuscum formantibus.

Hab. ad lignum Fraxini Orni in monte Treskovác in Banatu prope Danubium (LOJKA).

2. *Gloniopsis araucana* Speg., Fungi Chilenses (1910) p. 118, cum 5247
icon. — Maculis nullis; peritheciis sparsis, erumpenti-superficialibus linearibus utrinque rotundatis, atris, coriaccello-membranaceis, opacis, 0,75-1 mm. long., 0,25-0,30 mm. lat. et alt.; ascis cylindraceo-subclavulatis breviter crasseque cuneato-pedicellatis, paraphysibus densis submucoso-coalescentibus obvallatis, 100×20 , octosporis; sporidiis cylindraceo-ellipsoideis, distichis, transverse 7-, longitudinaliter 1-septatis, ad septa tria primaria constrictulis, hyalinis, 24-28 \times 12-13.

Hab. in scapis siccis subputridis Francoæ sonchifoliæ, prope Bahia de Corral Chile Amer. austr.

3. *Gloniopsis xylogramma* Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 157. 5248
— Peritheciis gregariis, linearibus, utrinque attenuatis atque acutis, emergentibus v. superficialibus, 1-3 mm., plerumque 2 mm. long., 0,25 mm. latis, nigris, rima longitudinali tenui hiantibus; ascis elongatis, estipitatis, 60×20 , octosporis; sporidiis uni-biseriatis, hyalinis, ovoideis, transverse triseptatis, cum uno septo longitudinali, recto v. obliquo, in singulo loculo, 11-14 \times 5-8; paraphysibus numerosissimis,asco paulo longioribus, agglutinatis.

Hab. in ligno putrescente ignoto, Nouméa Nova Caledonia (CACOT).

4. *Gloniopsis ambigua* Sacc., in Ann. Myc. X (1912) p. 317. — Pe- 5249
ritheciis gregariis, longitudinaliter parallelis, rectis, lineari-lanceolatis, nigris, depressis, 1-1,5 mm. long., 0,3 mm. lat., rima angu-

stissima exaratis; ascis clavatis, breviter sensim stipitatis, 75-80 × 10-12, apice obtusatis, 6-8-sporis; paraphysibus filiformi-clavulatis tertia parte superiori opace nigricantibus et epithecium atrum formantibus; sporidiis oblongo-clavulatis, utrinque obtusulis, 5-septato-muriformibus, medio non v. vix constrictis, 16-17 × 5-5,5, hyalinis, farcitis.

Hab. in ramis decorticatis putrescentibus *Quercus* sp. (ut videtur), Castel Gandolfo prope Romam vere 1904 (D. SACCARDO). — Ab affini *Gl. Cisti* Rehm — Syll. IX, p. 1118 — distingui videtur sporidiis clavulatis, vix constrictis, ascisque paullo minoribus, paraphysibus tertia parte superiori incrassatis aterrimis, nec non matrice.

Sect. 7. Phæodictyæ.

HYSTEROGRAPHIUM Corda — Syll. II p. 776, IX p. 1119, XI p. 389, XIV p. 718, XVI p. 668, XVII p. 912.

1. *Hysterographium fuegianum* Speg. — Syll. IX, pag. 1121 — var. 5250
intermedium Rehm in Swensk. Vet. Akad. Handl. XXV (1899) p. 11, t. 17, f. 17 (extr.). — A typo distinguitur peritheciis utrinque acutiusculis v. obtusiusculis et sæpe longioribus, nempe 2 mm. long., 0,5-0,8 mm. cr.; sporidiis elliptico-biconicis, 8-10-septatis, verticaliter quoque 2-3-septatis, strato mucoso tenuissimo obductis.

Hab. ad ramos putres *Fagi* antarcticæ, Punta Arenas Rio Grande Brasilæ: — Forma media inter *H. fuegianum* et *H. magellanicum*.

2. *Hysterographium Elasticæ* Koord., Botanisk. Untersuch. (1907) 5251 p. 163, fig. 7. — Peritheciis oblongis, erumpenti-superficialibus, atris, coriaceis, labiis tumidis latiuscule hiantibus, 1-2 mm. longis et 150-300 μ . latibus; ascis clavatis, apice rotundatis, haud incrassatis, octosporis, 90-100 × 20-25, sessilibus; sporidiis distichis, oblongis, utrinque rotundatis, 28-30 × 10-13, 6-9-septato-muriformibus medio haud constrictis, pallide olivaceo-fuscescentibus; paraphysibus filiformibus,asco longioribus, apice clavatis.

Hab. in cortice vulnerato *Fici* elasticæ prope Karangga-jam prov. Kedu Java (KOORDERS).

3. *Hysterographium varians* Vouaux, Bull. Soc. Myc. Fr. (1910) p. 157. 5252 — Peritheciis irregularibus, primum ovoideis deinde elongatis, fusiformibus v. etiam linearibus, utrinque acutiusculis v. rectis v.

sæpius varie curvulis, dense gregariis, late apertis, utrinque unisulcatis, parvis, primum 0,4 mm. long., 0,2 mm. latis, deinde 0,5-1 mm. long., 0,2 mm. latis, nigris; ascis elongato-claviformibus, estipitatis, octosporis, $90 \approx 14$; sporidiis biseriatis, ellipsoideis, utrinque rotundatis, medio constrictis, septis transversis præcipuis 3, secundariis 1-2 v. etiam 4; septo longitudinali 1 in loculis mediis, rarius etiam in loculis extremis, $20 \approx 8$.

Hab. in vetusto cortice ignoto, Indo-China.

4. *Hysterographium elongatum* (Wahl.) Corda — Syll. II, p. 777 — 5258
var. *orobicum* Rota-Rossi, III Contr. Mic. Bergamo, Atti R. Ist. bot. Pavia ser. II, v. XIII p. 290 (extr. 1907). — A typo differt sporidiis recte, demum leniter oblique, monostichis, transverse 5-septatis, medio non vel vix constrictis, $20-25 \approx 10-12$.

Hab. ad lignum decorticatum, Foppenico, Bergamo Italia bor.

5. *Hysterographium Cumingii* Speg., Fungi Chilenses (1910) p. 119, 5254
cum icon. — Peritheciis laxè gregariis, innato-erumpentibus, non v. vix prominulis, anguste linearibus longiusculis, sordide fuscis, carbonaceis, 0,5-5 mm. long., 0,25-0,30 mm. lat.; ascis obolavatis subsessilibus non v. parcissime paraphysatis, $70-80 \approx 14$, octosporis; sporidiis distichis ellipsoideo-elongatis utrinque subacutiusculis, typice transverse 7-septatis, loculis uno v. altero v. omnibus septis 1 v. 2 longitudinalibus divisis, fuligineis, mediocribus, e latere leviter angustioribus, $20-22 \approx 5-8$.

Hab. in culmis putrescentibus Chusqueæ Cumingii, Cerro Alegre de Valparaiso Chile Amer. austr.

Sect. 8. Scolecosporæ.

HADOTIA R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy (1906) pag. 11 (Etym. a Doct. HADOT, mycologo vogesiaco). — Perithecia superficialia oblongata, membranaceo-carbonacea, longitudinaliter dehiscentia; asci 8-spори, cylindræceo-clavati; sporidia filiformia, hyalina, unilocularia v. septata, parallele stipitata; paraphyses filiformes. — In Tabulis comparativis generum præsens exacte occupabit n. 30 inter *Hysteriaceas* (Syll. XIV, p. 26-27).

1. *Hadotia nivalis* R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy 5255
(1906) Extr. p. 12, fig. 2. — Peritheciis culmigenis, sparsis, nigris, nitidis, levibus, membranaceo-carbonaceis, oblongatis, utrinque rotundatis, 0,75 - 1,25 \approx 0,50 - 0,75 mm., rima perithecii

longitudinem æquante demum hiantibus; hymenio hygrophano, udo griseo, sicco albido; ascis cylindraceo-clavatis, apice conoideo, obtuso, sessilibus v. breviter pedicellatis, $80-110 \approx 8-11$; sporidiis parallele stipatis, rectis v. flexuosis, apice rotundatis, basi longe attenuatis, acutis, $50-80 \approx 1,5-2$, sæpe 1-3-septatis; paraphysibus filiformibus ascos superantibus, apice flexuosis v. circinatis.

Hab. in culmis siccis *Alopecuri textilis* Boiss. in zona alpina M. Argæi Cappadocia Anatolia. — Socia adest *Leptostromella nivalis* quæ status imperfectus esse videtur.

HYPODERMA DC. — Syll. II p. 784, IX p. 1113, XI p. 389, XIV p. 719, XVI p. 669.

1. *Hypoderma andinum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5256 (1909) pag. 435, cum icon. — Peritheciis laxè gregariis innato-erumpentibus, atris, elliptico-linearibus 0,4-1 mm. long., 200-250 μ . diam., rarissime bilobis v. furcatis, per ætatem longitudinaliter dehiscentibus; ascis clavulatis basi sensim longeque attenuatis, in pedicellum subbrevisculum productis, $70 \approx 16-18$, octosporis, paraphysatis; sporidiis distichis v. oblique monostichis subbotuliformibus, leniter curvulis, $14 \approx 3-4$, hyalinis.

Hab. ad ramulos nec non ad spinas vivas v. languidas *Patagonii pinifolii*, Puente del Inca, prope Mendoza Argentina America austr.

2. *Hypoderma ptarmicola* Fairm., Proc. Rochest. Ac. of Sc. IV (1906) 5257 p. 216, tab. XX, fig. 2. — Peritheciis elongatis, erumpentibus, 1-4 mm. long., primum apertis, siccis fere clausis, margine, integris, regularibus, quandoque incurvatis, extus nigris, intus e rubro-brunneo brunneis, arescendo subolivaceis; ascis clavato-cylindraceis, apice angustatis, basi longe et anguste pedicellatis, $74-125 \approx 10-13$, plerumque $80-90 \approx 10$; sporidiis oblongis, rectis v. curvis, apice acutatis, $33-35 \approx 2-3$, guttulatis et septis endochromaticis spurie uniseptatis.

Hab. in caulibus siccis *Achilleæ Ptarmicæ*, Lyndonville N. Y. Amer. bor.

3. *Hypoderma Werthianum* P. Henn., Deutsche Südpolar Exped. Bd. 5258 VIII (1906) Extr. p. 9, t. I, f. 12. — Maculis pallidulis; peritheciis innatis, oblonge subpulvinatis, amphigenis, sparsis v. striiformi-gregariis, atris, membranaceis, rima longitudinali dehiscentibus, 0,6-0,8 $\approx 4-5$ mm. diam.; ascis subfusoides-clavatis, basi attenuato-substipitatis, vertice tunicatis obtuso-rotundatis v. subacutiusculis,

75-100 \approx 10-15, octosporis; paraphysibus filiformibus, repetito-ramosis, hyalinis, c. 2 μ . cr., apice haud incrassatis; sporidiis subtristichis v. conglobatis, bacillaribus, rectis v. curvulis, utrinque obtuso-rotundatis, interdum subattenuatis, pluriguttulatis vel septulatis, hyalinis, leviter cyanescentibus, 35-40 \approx 2-2,5.

Hab. in foliis Poæ Cookii Hook. f., Possession-Insel Crozet-Gruppe (E. WERTH).

LOPHODERMIIUM Chev. — Syll. II p. 791, IX p. 1124, XI p. 390, XIV p. 720, XVI p. 670, XVII p. 913.

1. *Lophodermium Mangiferæ* Koord., Botan. Untersuch. (1907) p. 163, 5259 fig. 6. — Peritheciis plerumque hypophyllis sparsis, innatis, plus minusve prominentibus, membranaceis, ellipsoideis, rima longitudinali dehiscentibus, 0,4-0,6 mm. longis, nudis, nigris, labiis depressis; ascis cylindraceo-clavatis, octosporis, apice obtusis v. acutis, 80-90 \approx 5-6; sporidiis parallele stipatis, filiformibus, rectis, 70-80 \approx 1, hyalinis, continuis, multiguttulatis; paraphysibus filiformibus, apice clavatis vel uncinatis vel clavato-flexuosis, ascum subæquantibus.

Hab. in foliis emortuis *Mangiferæ indicæ* prope Penung-galan prov. Kediri Java (KOORDERS).

2. *Lophodermium alliaceum* Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV 5260 (1905) pag. 34. — Peritheciis sparsis v. gregariis, basi immersis, elongatis, ellipsoideis v. subcircularibus, utrinque obtusis, convexis, rima angusta apertis, tenuiter marginatis, nigris opacis, striatulis 0,3-0,8 mm. long., 0,2-0,5 mm. latis; ascis clavatis, supra obtuse angustatis, basi in pedicellum attenuatis, rectis, octosporis 80-95 \approx 8, hyalinis, paraphysibus filiformibus superantibus, rectis v. incurvatis obsitis; sporidiis polystichis, acicularibus, utrinque acutatis, rectis v. curvulis, unilocularibus, guttulatis, hyalinis, in asco flavescenscentibus, 30-40 \approx 1-1,5.

Hab. in bracteis *Allii oleracei*, Höhenhot Luxemburgia. —

L. sphaeroideo (A. S.) Duby affine.

3. *Lophodermium Luzulæ* Hazsl. Magyar Discom. p. 186, t. III, f. 6. 5261 — Peritheciis oblongis v. lanceolatis, rima lata apertis; ascis clavatis, breviter noduloso-stipitatis, apice obtusule-acutatis, bacillari-paraphysatis, octosporis; sporidiis polystichis, clavulato-bacillaribus, multi-pseudoseptatis, hyalinis.

Hab. in foliis languidis *Luzulæ maximæ* in Hungaria.

4. *Lophodermium arundinaceum* (Schrad.) Chev. — Syll. II, p. 795 5262

— var. *Piptatheri* Ranojevic, Ann. Mycol. VIII (1910) p. 354. — Peritheciis ellipsoideis, apice rotundatis vel subattenuatis, nigris, rimosis, . . . 0,3-0,5 \times 0,20-0,25; ascis clavatis, apice obtuse attenuatis, basi in pedicellum breviter attenuatis, 48-65 \times 7-8, octosporis; sporidiis filiformibus, parallele dispositis, 32-48 \times 1, hyalinis; paraphysibus filiformibus, septatis, supra uncinatis v. contortis, integris v. raro apice furcatis, 76 \times 1-1,5.

Hab. in foliis siccis *Piptatheri paradoxo* prope Krepoljin, Serbia.

Subfam. 2. Ostropeæ.

Sect. Scolecosporæ.

ROBERGEA Desm. — Syll. II p. 806, IX p. 1128.

1. *Robergea Albicetræ* (Heald et Wolf) Sacc. et Trav. — Syll. XX, 526¹ p. 695 — *Cyanospora Albicetræ* Heald et Wolf, Mycologia (1910) n. 5, p. 209-210, t. XXXI et f. 1-3 pag. 206-210. — Pustulis stromaticis in areis corticis v. ligni dealbatis oblongo-lenticularibus, obtuse prominulis, laxe gregariis v. 2-3-coacervatis, 1-2 mm. long.; peritheciis 1-2 in quoque stromate, sæpius solitariis, 825-1200 \times 260-400, horizontaliter elongatis, tenuiter membranaceis, omnino immersis, in ostiolum laterale obtusulum tenuatis; ascis cylindraceis 700-1100 \times 8-10, deorsum leviter tenuatis, apice obtusis tunica incrassata, supra basim denique fissis erumpentibusque; paraphysibus filiformibus, 1 μ . cr.; sporidiis filiformibus varie curvatis v. contortis, crebro multiseptatis, 600-1000 \times 3, ex hyalino cyaneis, articulis cuboideis paullo longioribus quam latis.

Hab. in cortice v. ligno decorticato *Juniperi* (Sabinæ) sabinoidis, Texas usque ad Mexicum. — Est certe *Robergeæ* species, diversa tamen videtur a speciebus jam cognitis.

2. *Robergea unica* Desm. — Syll. II, p. 806 — var. *divergens* Rehm 526² in Strasser Verh. k. k. zool.-bot. Ges. Wien LVII (1907) p. 324. — Peritheciis *Sphaeriæ*-formibus sub cortice denigrato ligno insidentibus, dein erumpentibus et excipulum albo-pruinose 1,5 mm. latum exerentibus, disco subrotundo nigro, in portum minutum apertis; sporidiis distincte septatis.

Hab. in ramis siccis Piri Mali, Sonntagberg Austriæ inf.
Syll. fung. XXII (XI-1912)

*Subfam. 3. Acrospermeæ.**Sect. Scolecosporæ.*

ACROSPERMUM Tode Syll. II p. 807, IX p. 1128, XIV p. 723, XVI p. 1146.

1. **Acrospermum ochraceum** Syd., Ann. Mycol. V (1907) p. 361. — 5265

Peritheciis sparsis, solitariis vel subinde binis trinis basi connexis, erectis, clavatis, valide compressis, ochraceis, basi sæpe paullo dilutioribus, glabris, apice obtusis, basi breviter stipitatis, 1-2 mm. longis, 250-400 μ . latis; ascis cylindraceis, longissimis, 200-350 \times 3-4; sporidiis filiformibus, tenuissimis, ascorum fere longitudine, hyalinis, 0,5 μ . crassis.

Hab. in foliis emortuis vel putrescentibus *Bambusæ*, Rio de Janeiro, Tijuca, Brasilia.

2. **Acrospermum conforme** Spegazz., An. Mus. Nac. Buenos Aires 5266

t. XIX (1909) p. 440. — Peritheciis sparsis sæpius epiphyllis, conoideis v. sublageniformibus, 250-300 \times 100-150, glabris, fulvellis, ascis linearibus basi longe tenuiterque attenuato-pedicellatis 180-200 \times 4-5; paraphysatis, octosporis; sporidiis filiformibus fasciculatis, 140-150 \times 0,5-0,7, hyalinis.

Hab. ad folia languida *Diplaznii latifoliae* in hortis pr. Tucumán Amer. austr.

DISCOMYCETÆ Fr. (*)

Syll. VIII p. 3, X p. 1, XI p. 391, XIV p. 378, XVI p. 695,
XVIII p. 1.

Fam. 1. Myriangiaceæ NYL.

Teste cl. v. HÖHNEL, qui fungillos huc relatos, diligenter scrutatus est (Cfr. Sitz. k. Akad. Wissensch. Wien, CXVIII, Abt. I, Apr. 1909) ad hanc familiam spectantia tantum seq. genera recognoscit et ita distinguit:

I. Stroma plus minus carbonaceum, nigrum.

Eurytheca de Seyn. — Sporidia tantum transverse septata. [*Eurytheca monspeliensis* de Seyn.].

Myriangium Mont. et Berk. — Sporidia clathrata, hyalina. [*M. Duriei* Mont. et B. = *Phymatosphæria abyssinica* Pass. = *Pyrenotheca yunnanensis* Pat.; *M. Pritzelianum* P. Henn.; *M. floridanum* (Ell. et Galw.) Rehm; *M. Uleanum* (P. Henn.) v. Höhn. = *Diplothea Uleana* P. Henn.; *M. Rhipsalidis* (P. Henn.) v. Höhn. = *Diplothea Rhipsalidis* P. Henn.].

II. Stroma non carbonaceum, rubrum v. brunneum.

Kusanoa P. Henn. — Sporidia tantum transverse septata, demum colorata. [*K. japonica* P. Henn. et Shir.].

Anhellia Rac. — Sporidia clathrata, demum colorata, Asci sub superficie stromatis unistratosi. [*A. tristis* Rac.].

Uleomyces P. Henn. — Sporidia clathrata, demum colorata. Asci in stromate profunde, irregulariter sparsi. [*U. parasiticus* P. Henn., *U. purpurascens* Rehm].

(*) De anatomia et morphologia Discomycetum confer, inter recentiora, imprimis opera J. LAGARDE, *Contribution à la connaissance des Discomycètes charnus* (Ann. Mycol. IV (1906) pagg. 125-256, 58 fig. et 2 tab., et de systematica: E. BOUDIER, *Histoire et classification des Discomycètes d'Europe*. Paris 1907, et *Icones mycologicae*. Paris 1904-1910, tab. 600 col.

Quod ad genera Myriangiaceis v. affinibus attributa attinet, ecce observationes cl. v. Höhnel, *Fragm. zur. Myk. VI.*

Myriangium Cinchonæ Rehm est *Arthothelii* species.

Phillipsiella purpurea Ph. et Hark. = *Harknessiella purpurea* (Ph. et H.) Sacc. esset potius vocanda *Coryne purpurea* (Ph. et Harkn.) v. Höhn. l. c. f. 19 inter Bulgariaceas.

Myriangella orbicularis Zimm. est potius *Micropeltis orbicularis* (Zimm.) v. Höhn. vocanda.

Microphyma Rickii Rehm est potius *Microthyrium* (Microthyriella) *Rickii* (Rehm) v. Höhn. nuncupandum.

Microphyma Bubakii Rehm est *Melaspilea*, forte *M. populinae* Rehm var.

Saccardia Durantæ Pat. var. Rickii Rehm est potius *Saccardinula Rickii* (Rehm) v. Höhn. dicenda.

Mollerella Epidendri Rehm videtur potius lichen minimus foliicola.

Trichophyma Bunchosiae Rehm, Pazschkea lichenoides Rehm, Puiggariella apiahyna Speg. et Melittosporiopsis violacea Rehm, sunt, teste cl. von Höhnel, ad Lichenes spectantia.

1. *Myriangium floridanum* (Ell. et Galw.) Rehm. ap. v. Höhnel in 5267
Sitzgb. k. Akad. Wiss. Wien, CXVIII, Abt. I, (Apr. 1909) p. 354,
Southworthia floridana Ell. et Galw. in herb. Ellis. — Stromatibus
solitariis v. crustaceo-aggregatis, globoso-depressis, nigris, vix ni-
tidis, 500-600 μ . diam., carbonaceis, e cellulis 8-10 μ . diam., supra
stratum 30 μ . cr., infra stratum basilare sterile 100 μ . cr. forman-
tibus conflatis; ascis irregulariter stratoze dispositis, ovato-globo-
sis, 36-48 μ . diam., confertis, octosporis, tenui-tunicatis, pariete
cellulari simplici separatis; sporidiis hyalinis, oblongo-clavulatis,
28-32 \times 9-13, sæpius 7-septatis et septo longitudinali unico inter-
rupto partitis, sæpe curvulis, utrinque rotundatis.

Hab. in ramis Citri Aurantii in Florida, Amer. bor.

2. *Myriangium Cinchonæ* Rehm, Ann. Myc. VI (1908) p. 325. — Stro- 5268
matibus e cortice crasso emergentibus, thallo proprio carentibus, gre-
gariis, orbicularibus vel oblongis, planis, haud marginatis, super-
ficie subverruculosis, atris, 0,5-1 mm. diam., intus hyalino-flavidu-
lis, ceraceo-corneis; ascis immersis, late dispersis et parenchymate
cellularum elongatarum magnarum separatis obtectisque, ovalibus,
ca. 100 \times 50-70, octosporis pariete 10-12 μ . extus lata,; sporidiis
ellipsoideis, utrinque obtusis, interdum subcurvatulis, transverse
11-13-longitudinaliter multoties divisus indeque muriformibus, pri-
mitus hyalinis, demum olivaceis, 50-60 \times 22-25, irregulariter po-
sitis; parenchymate stromatis versus superficiem olivaceo, epithe-
cium latum formante; hypothecio proprio nullo.

Hab. in cortice venali *Cinchonæ* regiæ in India orientali.

3. *Myriangium curreyoideum* (Theiss.) Sacc. et Trott., *Phymatosphaeria* 5269
curreyoidea Theiss., Beih. Botan. Centralbl. Bd. XXVII (1910)
 Abt. II, p. 402. — Stromatibus nigris dothideaceis, primo immer-
 sis rubricosis, dein epidermide fissa erumpentibus brunnescentibus,
 demum superficialibus, subliberis v. epidermide breviter cinctis, lata
 basi semper innatis, lenticularibus, 250-350 μ . diam. v. oblongo-
 ellipticis, c. 300-600 \approx 250, interdum confluentibus, intus brunneo-
 rubris, extus opacis, atris; strato peripherico textura carbonacea
 pseudoloculos globosos v. 4-6-angulatos monascos efformante; ascis
 globosis 24-33 μ . diam. v. ellipsoideis 25-32 \approx 20-27, crasse tunicatis,
 astipitatis, aparaphysatis, octosporis; sporidiis ellipsoideis rectis v.
 leniter curvulis, utrinque rotundatis v. inferius angustatis, sub-
 clavatis, conglobatis, hyalinis, dein flavescentibus, demum brun-
 neis, muriformibus, septis transversis plerumque 3 raro 4-5, lon-
 gitudinalibus 1-3, ad septa præsertim medio constrictis (quando
 maturis), 18-22 \approx 6-8.

Hab. in ramulis et foliorum nervis Compositæ subligno-
 sæ decumbentis, Sao Leopoldo Rio Grande do Sul Brasilæ (Rick).

4. *Myriangium Bambusæ* Rick, Broteria. V (1906) p. 39. — Stromate 5270
 coriaceo-carbonaceo, effuso, tenui; apotheciis (?) inter se liberis, bre-
 viter stipitatis, applanatis v. etiam calyciformibus, majusculis, ru-
 gosis, atris, carnosolentis, 1-3 mm. diam., aggregatis; ascis primi-
 tus sphaericis, humefactis cylindricis et tunc usque ad 160 μ . long.,
 20 μ . latis, membrana tenui, octosporis; sporidiis uni- v. biserialibus
 25-50 \approx 12-15, hyalinis muricatis, uno septo constrictis et sic facile
 in duas partes scissis; paraphysibus non visis.

Hab. in ramis siccis *Bambusæ*, Rio Grande do Sul Brasilæ.
 — Habitus exterior *Karschia nigerrimæ*. Ob sporidiorum et apo-
 thecii (?) characteres vix *Myriangium*.

MICROPHYMA Speg. — Syll. VIII p. 844.

1. *Microphyma Bubákii* Rehm, in Bubák Beitr. Pilzfl. Ungar. in Nö- 5271
 vénytani Közlemények (1907) Heft 4, Extr. p. 19. — Ascomatibus
 in maculis albis ad lignum gregarie insidentibus, globosis, 150-
 160 μ . lat., brunneis, levibus, excipulo tenui parenchymático, brun-
 neo omnino tectis, basi hyphis longis, septatis, brunneolis, 4-5 μ .
 cr. cinctis; ascis ovoideis e basi ascomatis inter se subparallelis,
 apice incrassatis, 50-55 \approx 15-18, octosporis, pseudoparaphysibus ge-
 latinosis, septatis, 3 μ . cr. cinctis, in parietem excipuli desinenti-

bus; sporidiis distichis, ovoideis, utrinque fortiter rotundatis, medio uniseptatis, loculis 1-2 grosse guttulatis, hyalinis, 12-14 \times 6-7. J. +

Hab. in ligno putri Fraxini Orni, Csernatale prope Herkulesfürdő Hungariæ. — A typo generis differt ascomate seu stromate intus haud distincte loculigero et tunc forte generice distinguì potest (*Microphymella* Rehm).

2. *Microphyma Rickii* Rehm, Broteria V (1906) p. 227. — Stromati- 5272
bus hypophyllis, innatis, orbicularibus, convexulis, extus fusconigris, haud papillatis, tenuissime scabriusculis, dispersis, 0,3-0,7 mm. diam.; ascis per matricem hyalinam parenchymatice contextam separatis, parallele positis, ovoideis, crasse tunicatis, 60-70 \times 30-35, octosporis; sporidiis fusoides, utrinque subacutatis, rectis v. curvatis, medio septatis, haud constrictis, granulis minutissimis repletis, hyalinis, 30 \times 7-9, parallele positis; epithecio tenui, fuscidulo, parenchymatico; hypothecio hyalino.

Hab. ad folia Xanthoxyli in Brasilia (Rick). — Dubium an fungus plane evolutus? Extremo peridermii folii strato obtectum stroma, modo colore nigro-fusco sine ullo pororum vestigio conspicuum, ascis autem singulatim dispositis non ad *Dothideaceas* pertinere potest.

MYXOTHECA Ferdinands. et Winge, Botanisk Tidsskr. XXX (1910) p. 212 (Etym. *myxa* mucus et *theca* h. e. ascus). — Stroma epiphyllum, superficiale, tenue, membranaceum, structura indistincte pseudoparenchymatica, ambitu substrigosum, læticolor. Asci in stromate singulatim sparsi, subglobosi, longiuscule stipitati, e centro communi, 7-10(-plures) orientes, membrana gelatinoso-deliqescente, ideoque quasi intra locellos mucosos inclusi, nullo autem strato parietino a stromate cingente limitati; sporidia oblonga, curvula, dense tessellato-muriformia, flavida, deliquescentia ascorum et delapsu stromatis liberata. — Genus quoad affinitatem ambiguum, Myriangiaceis, imprimis *Ascomycetellæ*, characteribus nonnullis accedens.

1. *Myxotheca hypocreoides* Ferdinands. et Winge, l. c. p. 212, f. 2. 5273
— Stromatibus in epiphyllis hinc inde sparsis, a mycelio intracellulari ortis, plaguliformibus, rotundatis, ad 1 mm. diam., vix $\frac{1}{10}$ mm. altis, ex ascis maturis prominulis luteolis, zonula albida sterili substrigosa cinctis, membranaceis, structura tenuiter et indistincte pseudoparenchymatica; ascis in stromate singulatim sparsis, monostichis v. subdistichis, juvenilibus plerumque profundius

immersis, maturis (stratis cingentibus incremento protrusis) parum supra superficiem stromatis prosilientibus, subglobosis, ovoideo-globosis v. citriformibus, 70-80 \approx 50-70 (membrana gelatinosa excepta), deorsum in stipitem circ. 5 μ . cr. (membrana excepta), longitud. bis-pluries diametrum ascorum superantem transeuntibus; stipitibus singulis seu hyphis ascigeris e cento communi 7-10(-pluribus) egredientibus, evanescentibus; membrana ascorum nec non stipitum mature gelatinoso-deliquestente, indistincte limitatis [qua de causa asci singuli intra locellos gelatinosos inclusi et desuper visi circulo hyalino circumscripti videntur]; sporidiis octonis, conglobatis, e dorso cylindraceo-oblongis, medio turgidulis, e latere curvatis, utrinque rotundatis, medio (intus) ventricosus, tenuiter tunicatis, densissime murali-cellulosis (septis transversalibus fere 20, longitudinalibus minus perspicuis, in fronde qualibet plerumque binis), 64-74 \approx 18-20, maturis flavidulis, deliquestentia ascorum et delapsu stromatis liberatis.

Hab. ad pinnas languescentes *Trichomanes pinnati*, in valle Maravalli dicta insulæ Trinidad (H. LASSEN).

Fam. 2. Saccardiaceæ v. HÖHN.

Sec. von Höhnelt in Sitzb. k. Akad. d. Wiss. Wien, CXVIII, Abt. I, Apr. 1909, pag. 369 hæc nova familiola Discomycetum dignoscitur ascomatibus superficialibus, marginatis; excipulo tenui, celluloso-parenchymatico; ascis globoso-ellipsoideis, paraphysibus articulatis epithecium tenue formantibus; sporidiis hyalinis v. coloratis; subiculo arachnoideo. Ecce genera:

Saccardia Cooke. — Sporidia clathrata, hyalina [*S. quercina* Cooke].

Dictyonella v. Höhn. — Sporidia clathrata, colorata [*D. erisiphoides* (Rehm) v. Höhn. = *Saccardia erisiphoides* Rehm].

Fam. 3. Phillipsiellæ v. HÖHN.

In hac familiola cl. v. Höhn., in Sitz. k. Ak. Wien CXVIII, Abt. I, Apr. 1909, p. 85, colligit genera Discomycetum *Phillipsiella* Cooke et *Protasia* Racib. ad Gymnoascaceas nutantia et digno-

scenda: ascomate perexiguo omnino superficiali, immarginato, ascis unistratosis, ovoideo-globosis, hyphis paraphysiformibus multiversis obvallatis, epithecium interruptum laxum formantibus; excipulo nullo. Huc pertinent:

Phillipsiella Cooke. — Sporidia hyalina, bicellularia; ascoma nudum [*Ph. atra* Cooke, *Ph. Puiggarii* (Speg.) v. Höhn. (= *Microphyma* Speg.); *Ph. graminicola* v. Höhn., *Ph. nigella* Ph. et Harkn.

Protasia Rac. Paras. Alg. und Pilze Javas III, p. 42 (species non indicatæ). —

1. *Phillipsiella graminicola* v. Höhn., Fragm. zur Myk. VI (1909) 5274 p. 85, *Microphyma graminicola* v. Höhn., Ergeb. Bot. Exp. Südbras. 1901, Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 33. — Stromatibus nigris opacis, depressis, tenuibus, sparsis, rotundatis v. elongatis, 200-250 μ ., stratu superficiali laxiusculo atro-brunneo; basi contextu plectenchymatico hyalino fertili; ascis unistratosis, globosis vel ovoideis, crasse tunicatis, 16-20 v. 13-16, octosporis; sporidiis hyalinis v. flavido-viridulis, bilocularibus, elongatis v. subclavulatis, ad septum non constrictis, utrinque rotundatis, loculo super. plerumque parum breviori et latiori, 10-12 v. 3-4.

Hab. in foliis vivis *Chusqueæ Wettsteinii*, in silvis in districtu urbis Itapeirica, Sao Paulo Brasilæ. — *M. Puiggarii* Speg. habitu simillima sed differt ascis minoribus, sporidiis pallidioribus, characteribus stromatis etc.

Fam. 4. Elsinoaceæ v. HÖHN.

Sec. cl. v. Höhn., Fragm. z. Mykol. VI, p. 98, in Sitzungsber. k. Akad. d. Wiss. CXVIII, Abt. I, Apr. 1909, p. 373, hæc nova familiola Myriangiaceis affinis, dignoscitur ascomatibus matrice innatis, denique, matrice partim destructa, lateraliter liberis, plectenchymate illimitato, carnosulo formatis, ascis inordinate immersis. Genera sunt:

Elsinoë Racib. — Sporidia transverse pluriseptata, hyalina [*E. Convolvariæ* Rac.].
Myriangina P. Henn. (ut subg. *Myriangii*). — Sporidia clathrata, hyalina [*M. mirabilis* P. Henn.].

Fam. 5. Cookellaceæ v. HÖHN.

In hac familiola nova Discomycetum colligit cl. v. Höhel in Sitzb. k. Akad. d. Wiss. Wien CXVIII, Abt. I, Apr. 1909, p. 354, typos sequentes dignoscendos ascomate disciformi, omnino superficiali, carnosulo-gelatinoso, late colorato.

A. Asci unistratosi; contextus fibroso-plectenchymaticus inter et supra ascos parum evolutus.

α Contextus inter et supra ascos sæpius omnino obsoletus.

Ascosorus P. H. et R. — Asci clavati; sporidia transverse septata, hyalina [*A. floridanus* (E. et M.) P. Henn. et R.].

β Contextus inter et supra ascos magis evolutus.

Leptophyma Sacc. — Asci breviores; sporidia bicellularia, hyalina [*L. aurantiacum* (E. et M.) Sacc.].

B. Asci pluristratosi; contextus inter et supra ascos copiose evolutus.

Cookella Sacc. — Sporidia clathrata, colorata; contextus fibroso-plectenchymaticus [*Cookella microscopica* Sacc.].

Ascomycetella Ellis ex p. — Sporidia clathrata, hyalina; contextus sub ascis minute celluloso-parenchymaticus, inter et supra ascos plus minus fibroso-plectenchymaticus [*A. sulphurea* (Wint.) Sacc.].

ASCOMYCETELLA Ellis — Syll. VIII p. 846, XIV p. 826, XVIII p. 116.

1. *Ascomycetella sulphurea* Wint. — Syll. VIII, pag. 846. — Hue 5275 videtur spectare *Myriangium flavum* (Wint.) P. Henn. in Hedw. XL (1901) p. 354, fig. 3, nam sub nomine *Asc. flavæ* Wint. nulla species extare videtur et nomen forte ex lapsu calami cl. Henningsii originem duxit.

COOKELLA Sacc. — Syll. I p. 71, VIII p. 846, XVI p. 802, 1152.

1. *Cookella paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 5276 t. XV, p. 31 (1908). — Subiculo et maculis nullis; stromatibus lenticularibus atris, glabris, amphigenis, superficialibus, 150-200 μ. diam. coriacellis, intus pulposo-albidis; ascis pulpa immersis, numerosis subpiriformibus 40 ≈ 30 antice obtusis crasseque tunicatis postice umbonatis; sporidiis conglobatis utrinque obtusis, 18-20 ≈ 9-10, tri-

septatis ad septum medium constrictis, hyalinis; in iisdem stromatibus: loculis pusillis, $50 \approx 30$, penicillum sporophororum filiformium, $30 \approx 1$, hyalinorum gerentibus cum sporulis ellipsoideis continuis utrinque acutiusculis $4-5 \approx 1,5$ chlorinulis faretis.

Hab. ad folia viva Bignoniaceæ ejusdam in dumetis Ipiranga até Cambucy, Brasilia (USTERI).

Fam. 6. Agyriaceæ v. HÖHN.

Teste cl. v. Höhn. in Sitzung. k. Akad. d. Wiss. Wien CXVIII, Abt. I, Apr. 1909, p. 362 et 1230, hæc familiola Discomycetum dignoscitur ascomatibus excipulo carentibus, superficialibus, convexis, basi applanatis, carnosogelatinosis, hypothecio plerumque atro minute celluloso, valde evolutis; ascis clavatis v. ovoideis, sæpe radiatim dispositis, paraphysibus apice grumosis epithecium coloratum formantibus. Ecce genera sec. v. Höhn:

Agyrium Fr. — Sporidia 1-cellularia.

Henningsiella Rehm. — Sporidia bicellularia. Paraphyses nullæ. Hic spectant: *Ascomycetella quitensis* Pat., *Asterina ilicis* Ell.

Lecideopsella v. Höhn. — Sporidia bicellularia. Paraphyses gelatinosæ, reticulatæ. Huc spectat *Lec. gelatinosa* v. Höhn.

Agyronella v. Höhn. — Sporidia bicellularia. Paraphyses apice vesiculoso-incrassatæ, brunneæ. — Huc spectat *Microthyrium Lagunculariæ* Wint.

Mollerella Wint. — Sporidia pluriseptata. Huc spectant *M. mirabilis* Wint. et *M. lirii* Zimm.

Agyrona v. Höhn. n. gen. — Sporidia clathrata. Huc spectant *Phymatosphaeria Calami* Rac., *Ascomycetella punctoidea* Rehm, *Saccardia atroviridula* Rehm, *Saccardia Durantæ* Pat. et Lag.

Agyriopsis Sacc. et Syd. — Sporidia filiformia. Huc spectant *A. Betheli* (E. et Ev.) Sacc. et Syd.

AGYRIUM Fr. — Syll. VIII p. 634, X p. 40, XVI p. 768, XVIII p. 140.

1. *Agyrium chilense* Speg., Fungi Chilenses (1910) p. 128, cum icon. 5277
— Euagyrium; ascomatibus laxè gregariis, primo epidermide tectis dein erumpentibus, pusillis, lenticularibus, succineis, glabris, 100-120 μ . diam.; ascis subclavulatis, deorsum attenuato-pedicellatis, 40-50 \approx 4-5, octosporis; paraphysibus filiformibus apice non v. vix incrassatulis cinctis; sporidiis distichis subcylindraceis, utrin-

que obtusiusculis atque minute 1-guttulatis, continuis, hyalinis, parvis, 10-11 \times 2,2-5.

Hab. in pedunculis siccis subputrescentibus Lobeliae Tupae prope Ciudad de Valdivia Chile, Amer. austr. — Habitus nectrioides et *Orbiliam* in mentem revocans.

2. *Agyrium rhizomatum* (Nitschke in sched.) Rehm, Ann. Mycol. IV 5278 (1907) p. 535, *Stictis rhizomatum* Nke. (Herb. Fuckel in Herbar Barbey-Boissier). — Stromatibus gregariis, sessilibus, punctiformibus vel elongatis, minutissimis, 0,1-0,12 mm., fuscidulo-rosaceis, haud marginatis, excipulo carentibus, hymenio in strato cellularum hyalinarum nidulante; ascis cylindraceo-clavatis, apice rotundatis et incrassatis, 120-150 \times 10, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, 12-15 \times 4, transverse mono- v. distichis; paraphysibus filiformibus, 2 μ ., ad apicem 2,5 μ . cr., hyalinis; hymenio in toto dilute rosaceo.

Hab. ad rhizomata in Germania? (NITSCHKE). — Species quoad locum systematicum dubia.

3. *Agyrium chartarum* Peyl, Beschreib. einiger neuer Pilze in Lotos VIII (1858) p. 31, t. I, f. 19. — Ascomatibus sessilibus v. brevissime stipitatis, initio globosis denique depressis dein disco collabescentibus, roseis dein flavo-roseis, minutissimis, excipulo nullo v. indistincto; ascis tereti-clavatis, fasciculatis, paraphysatis, octosporis; sporidiis monostichis, globosis, hyalinis, levibus.

Hab. in charta putri in calidariis, temp. 18° R. in Bohemia.

AGYRIOPSIS Sacc. et Syd. — Syll. XIV p. 805, XVI p. 775.

1. *Agyriopsis javanica* v. Höhn. Fragm. z. Myk. VIII (1909) in Stzb. 5280 k. Ak. d. Wiss. Wien, CXVIII, Abt. I, p. 1227. — Ascomatibus molli-carnosis, omnino superficialibus, regulariter sparsis, irregulariter rotundatis, late insidentibus, discoideis, usque ad 300 μ . latis et 70 μ . cr., siccis flavo-brunneis et minute farinaceis, udis magis flavescentibus, subiculo et excipulo destitutis; hypothecio 15-20 μ . cr., pallido indistincte minute celluloso plectenchymatico; ascis copiosis, clavatis supra rotundatis v. vix conoideo-angustatis, crassiuscule tunicatis, basi breviter incrassato-pedicellatis, 44-75 \times 7,5-8 (plerumque 60 \times 8), octosporis; sporidiis tristichis v. tetrastichis, parallelis, hyalinis, supra rotundatis et clavatis usque ad 3 μ . incrassatis, basi sensim attenuatis acutiusculis, sexlocularibus, in articulos facile secedentibus, 28-33 \times 3; paraphysibus filiformi-

bus, 1 μ . cr., supra ramulosis ascos non superantibus; epithecio e velo tenui flavo-brunneo minute granuloso-farinoso constituto. J-.

Hab. in pagina inferiore foliorum viventium *Paratropiæ* sp. in silvis prope Tjibodas in ins. Java.

LECIDEOPSELLA v. Höhn. *Fragm. Myk. z. VIII* (1909) in Sitzb. k.

Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1229 (Etym. dim. a *Lecideopsis*, cui affinis). — Follicola; ascomata depresso adnata, superficialia, excipulo destituta, tenuia gelatinosa, pallide colorata; asci ovoidei, octospori; sporidia hyalina v. subhyalina, bilocularia; paraphyses gelatinosæ, reticulato-ramosæ, epithecium tenue, pallidum, membranaceum efformantes; hypothecium tenuissimum. J-.

1. *Lecideopsella gelatinosa* v. Höhn., l. c. p. 1230. — Ascomatibus 5281
hypophyllis, sparsis, superficialibus, omnino adnatis, 400-1000 μ .
latis, 40 μ . circ. cr. ad marginem tenuioribus, gelatinosis, griseo-
brunneolis; ascis laxiusculis globoso-ovoideis, basi breviter nodu-
loso-stipitatis, octosporis, 32-35 \times 28; paraphysibus tenuissimis,
hyalinis; sporidiis parallelis, ovoideo-elongatis, utrinque rotundatis,
bilocularibus, loculo superiori breviori et latiori, flavidis, 16 \times 7;
hypothecio pallido, minute celluloso plectenchymatico.

Hab. in pagina inferiori foliorum *Paratropiæ* sp. in silvis
Tjibodas in ins. Java.

AGYRONELLA v. Höhn., *Fragm. z. Mykol. VIII* (1909) Sitzb. k.

Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1229 (Etym. *Agyrium*,
cui affinis). — A *Lecideopsella* von Höhn. differt præcipue para-
physibus plerumque brunneolis, apice fortiter vesiculoso-incrassatis
et epithecium cellulosum efformantibus, hypothecio modice incras-
sato, obscuro.

1. *Agyronella Lagunculariæ* (Wint.) v. Höhn. l. c. p. 1230, *Micro-* 5282
thyrium Lagunculariæ Wint. — Syll. IX, p. 1058.

HENNINGSIELLA Rehm — Syll. XIV p. 32.

1. *Henningsiella Fairmani* Rehm, *Ann. Mycol. VII* (1909) p. 534. — 5283

Ascomatibus excipulo carentibus, sessilibus, gregariis, orbicularibus,
planis dein convexulis, nudo oculo vix visibilibus, 0,1 mm. diam.,
glabris, albidulis v. cinereis, siccis subochraceis, subgelatinosis;
hypothecio hyalino, parenchymatico; ascis saccatis, apice rotunda-
tis, haud incrassatis, c. 60-80 \times 10-15, 8-sporis; jodi ope nulla;
sporidiis oblongis v. subclavatis, utrinque rotundatis, rectis, 1-cel-

lularibus, gutta magna centrali instructis, dein medio septatis, haud constrictis, hyalinis, 10-15 \times 4-6, 1-2-stichis; paraphysibus filiformibus conglutinatiss, epithecium dilute flavidulum formantibus.

Hab. in ligno putrido in silvis, Lyndonville New York Amer. bor. (FAIRMAN).

Fam. 7. Onygenaceæ FR.

DENDROSPHÆRA Pat., Bull. Soc. Myc. France XXIII (1907) p. 69

(Etyrn. *dendron* arbor et *sphæra*). — Humicola; ascoma stipitatum, sursum ramosum apicibus capitato-globulosis, primum floccosum dein denudatum; gleba ceracea dein pulveracea. Asci rotundati v. ovòidei, octospori, evanidi; sporidia simplicia, sphæroidea, fere hyalina. — Gen. *Onygena* et *Trichocomæ* proximum.

1. **Dendrosphæra Eberhardti** Pat., l. c. p. 69. — Stromate stipitifor- 5284

erecto radicato, infra simplici cylindræo, levi v. sulcato-rugoso 10-15 \times 3-6 mm. non carbonaceo, brunneo-rubro basi obscuriore, hyphis confertis gracilibus (3 μ . cr.) flavidis, septatis constituto, supra ramoso, ramis plus minusve elongatis, apice subgloboso-incrassatis, 2-6 mm., primum albis dein flavo-auratis, intus plurilocularibus; ascis globosis v. ovoideis, 30-50 \times 20-27 raro uno latere attenuatis, octosporis; sporidiis sphæroideis 8-10 μ . diam., grosse uniguttulatis, primum levibus demum ob incrustationes asperulis v. irregulariter echinulatis.

Hab. ad terram in silva Djirin, alt. 1600 m. Indo-China (EBERHARDT).

Fam. 8. Elaphomycetaceæ TUL.

ELAPHOMYCES Nees — Syll. VIII p. 863, X: p. 80, XI p. 441.

1. **Elaphomyces virgatosporus** Hollós, Ann. Mus. Nat. Hung. VI (1908) 5285

p. 318. — Globosus v. compressus, sulcatus v. excavatus, magnitudine nucis avellanæ v. juglandis, mycelio umbrino instructus; velo papillis obtusis vel spinulis truncatis crassis sparso et inæqualiter tecto, asper, carbonaceus, obsoletus, durus, fragilis, senescendo rimosus; cortice albido, albo-griseo, velum æquante v. cras-

sio, mox evanido; gleba umbrina; sporidiis globosis, levibus v. asperatis, subtiliter et dense virgatis, brunneis, demum opacis, 16-22 μ ., plerumque 20 μ . diam.

Hab. in fagetis et carpinetis ad Litke Hungariæ.

2. *Elaphomyces plumbeus* Hesse Hypog. II, p. 69, t. 16, fig. 15-18, 5286 t. 21, fig. 53, t. 22, fig. 6. — Ascomate 0,5-1,5 cm. diam., plerumque piriformi; cortice exteriori plumbeo, levi, cortice interiore sordide griseo; gleba (maturitatis tempore) intense brunnea; ascis globosis 4-8-sporis; sporidiis globosis, levibus, flavo-virescentibus, 18-20 μ . diam.; odore fungi ingrato, mucescente.

Hab. ad terram humosam inter Quercus et Fagos in provincia Hessen-Nassau Germaniæ.

3. *Elaphomyces uliginosus* Hesse Hypog. II, p. 67, tab. 22, fig. 8, 5287 28, 30. — Ascomate 2-2,5 cm. diam., strato exteriori intense rubro-brunneo, denique fere nigro, levi, mycelio floccoso griseo-virente involuto; strato interiore spongioso, initio candido, dein griseo; gleba primo albo-floccosa, dein grisea, denique brunneo-variegata tandemque nigricante; ascis breviter pedicellatis, globoso-ovoidis; sporidiis globosis, hyalinis dein flavido-griseis, denique saturate rubro-brunneis, 16-18 μ . diam., levibus.

Hab. ad terram silvaticam inter Fagos in provincia Hessen-Nassau Germaniæ.

Fam. 9. Tuberaceæ

GENEA Vitt. — Syll. VIII p. 873.

1. *Genea vagans* Mattir., Flenco Fung. hypog. Vallombr. p. 1 extr. 5288 (Malp. 1900), Bucholtz in Ann. Mycol. I (1903) pag. 169, t. IV, f. 16-18. — Ut plurimum Pisi magnitudine, carbonaceo-atra, glabra, ostiolata, globosa v. irregularis, in utraque facie verrucosa, coma radiceiformi mediocri prædita; cavitate interiori simplici v. irregulariter lacunosa; ascis generis, cylindraceis, octosporis; sporidiis ellipsoideis, 31 \times 23 (sine verrucis), verrucis conicis conspicuis, 5,8 \times 4,3, tectis, hyalinis.

Hab. in silva Vallumbrosa Etruriæ sub Abietibus et Fagis (MATTIROLO) in agro Tridentino (BRESADOLA) et sub Populis, Tiliis, Quercubus et Ulmis pr. Mosca Rossicæ. — A *Genea*

hispidula forma sporidiorum ascomatisque glabritie et colore dignoscitur. Odor debilis nec peculiaris.

2. *Genea Thwaitesii* (B. et Br.) Petch, Ann. Mycol. V (1907) p. 475. 5289
— Ita vocanda *Hydnocystis Thwaitesii* B. et Br. — Syll. VIII, p. 877.

MYRMECOCYSTIS Harkn. — Syll. XVI p. 809.

1. *Myrmecocystis cerebriformis* Harkn. — Syll. XVI, p. 809 — Ed. 5290
Fischer, Botan. Ztg. (1908) p. 145, tab. VI, fig. 1-3; *Pseudogenea californica* Ed. Fischer, Ber. deutsch. bot. Ges. XXV (1907) pag. 372, Fedde Repertorium VII (1909) p. 193. — Irregularis, gibbosus et sulcatus, basi distincta destitutus, lacuna lobata et sinuosa, nonnullis locis ad fungi superficiem aperta instructus; diam. ad 1 cm.; superficie et lacunæ parietibus cortice pseudoparenchymatico, minute verrucoso, cremeo-albo obductis; hymeniis disjunctis arcuatis, in interiorem fungi lacunam spectantibus; paraphysibus septatis, fasciculatim ascis immixtis, sursum in corticem lacunæ interioris transeuntibus; ascis cylindraceo-clavatis, 180-220 × 35; sporidiis sphaericis, diam. 28-35 μ ., episporio crasso, flavescenti, imperfecte et irregulariter verrucoso v. reticulato instructis (diagn. sec. FISCHER).

Hab. plane subterranea in arenosis Californiæ. — A *Myrmec. Vallisumbrosæ* (Bucholtz) Ed. Fischer (syn. *Pseudogenea* Buch.) differt forma irregulari, hymeniis distinctius disjunctis et arcuatis, sporidiis majoribus.

PSEUDOBALSAMIA Ed. Fischer, Botan. Zeitg. (1908) p. 154; Fedde Repertorium VII (1909) p. 194 (Ety. *pseudes* falsus et *Balsamia*). — Fungus basi distincta destitutus, cortice pseudoparenchymatico obductus; venæ externæ tomento repletæ v. apicem versus convergentes v. irregulariter dispositæ nonnullisque locis ad fungi superficiem apertæ; asci octospori, elliptico-rotundati, per totam fungi carnem inordinate inspersi; sporidia ellipsoidea in asco varie (non seriatim) disposita, hyalina, levia.

1. *Pseudobalsamia Setchellii* E. Fisch., l. c. tab. VI, fig. 13-13; Fedde 5291
Repertorium VII (1909) p. 194. — Fungus plus minusve regularis, diam. ad 1,5 cm., habitu *Balsamiæ fragiformi* persimilis; corticis superficie fulvo-badia, verrucis creberrimis stipatis pyramidatis et nonnumquam subsulcatis asperata; ascis elliptico-rotundatis 50-70 × 25-35; sporidiis hyalinis, levibus, 21-28 × 10-12.

Hab. in terra sub Pinu radiata, Berkeley Californiæ (N. L. GARDNER).

TUBER Mich. — Syll. VIII p. 882, X p. 81, XI p. 443, XVI p. 813, XVIII p. 206.

1. *Tuber puberulum* B. et Br. — Syll. VIII, p. 893 — var. *longi- 5292*
sporum Bucholtz, Bull. Soc. Imper. Mat. Moscou (1907) n. 4,
 p. 453. — Strato peridiali interno hinc inde ex hyphis extrorsum
 versis intricatis conflato; sporidiis longioribus.

Hab. ad terram, Krjukowo prope Nikolaibahn, Russia.

2. *Tuber michailowskjanum* Bucholtz, Bull. Soc. Imper. Nat. Moscou 5293
 (1907) n. 4, pag. 457. Ita vocandum *Tuber puberulum* B. et Br.
 var. *michailowskjanum* Buch. — Syll. XVIII, pag. 206. — Sec.
 cl. Bucholtz in l. c. pag. 459 hæ varietates distinguendæ sunt:
a. microreticulatum Buch. l. c., areolato sporarum minuta; areolæ
 trans lucem non minus quam 4-5 visibiles. — Ad terram Sen-
 jkino et Krjukowo, Moskau Russia. — *b. medioreticulatum* Buch.,
 l. c.: areolatio sporarum magnitudine media; areolæ trans lucem
 3-4. — In silvis Gratschewniki, Pljeskowo, Krasnaja Pachra, Se-
 njkino etc. Russia. — *c. macroreticulatum* Buch., l. c. pag. 460,
 Syn. *T. ferrugineum* Vitt. var. *balsamioides* Buch., Syll. XVIII,
 p. 207: areolatio sporarum conspicua; areolæ trans lucem 2, raro
 ultra, visibiles. — In Rossia compluribus locis.

3. *Tuber sinuosum* Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5294
 y. Nat. Madrid (1908) Extr. pag. 15, tab. I, fig. 9-12, tab. III,
 fig. 32-34. — Ascomatibus subglobosis sed variabilibus, irregula-
 riter mamillatis, duris, sulcatis, 4-7 cm. latis; superficie inæquali
 sed levi, opaca, papillis v. reticulis destituta, colore etiam variabili
 ex subochraceo rubescente; carne alba, venis tenuibus undulatis
 griseis prædita; ascis subovoideis v. piriformibus, irregularibus, 7-
 v. 8-sporis; sporidiis sphæroideis breviter echinulatis.

Hab. ad terram, Villanueva del Fresno prope Badajoz Hispania. — Edule; sapore ed odore forti grato.

4. *Tuber lutescens* Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5295
 y Nat. Madrid (1908) Extr. p. 13, tab. I, fig. 5-8, tab. III, f. 29-
 31. — Ascomate tuberoso subgloboso, irregulari, 3-5 cm. lato, su-
 perficie undulata v. submamillata, hinc inde subsulcata, levi, ro-
 seo-ochracea; carne alba et primum amorpha dein venis griseis
 undulatis divisa, cortice tenui 0,25-0,50 mm. cr.; ascis ellipsoideis

irregularibus, tenuissime tunicatis, plerumque octosporis; sporidiis sphaeroideis, echinatis.

Hab. in Hispania plerumque centrali compluribus locis. — E dule; odore et sapore tenui; a *T. rufo* et *nitido* diversum.

5. *Tuber pallidum* Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5296 y Nat. Madrid (1908) Extr. p. 10, tab. I, fig. 1-4, tab. III, f. 23-28. — Ascomate tuberiformi, transverse subellipsoideo, 2-3 cm. alto, 2-4 cm. lato, sæpe irregulari v. asymmetrico; superficie pallide ex alutaceo brunnea levi, subæquali; carne primum alba dein grisea; ascis ovoideis, irregularibus, plerumque octosporis; sporidiis sphaeroideis, griseolis, echinulatis, spinulis acutis laxiusculis longis.

Hab. in Hispaniæ, imprimis centr. et septentrionalis compluribus locis. — Edule; verisimiliter parasiticum *Helianthem* (*Tuberaricæ*) variabilis.

6. *Tuber Lyoni* Butters, Botan. Gaz. XXXV (1903) pag. 431, cum 5297 icon. — Ascomatibus globosis v. irregulariter ellipticis, 0,5-2 cm. diam., uno latere longitudinaliter excavatis, glabris, læte castaneis, demum minute areolatis et nigris, peridio subtenui, cartilagineo; gleba violaceo-brunnea, carnosa sed granulosa; septis peridii numerosis anastomosantibus, labyrinthiformibus, translucidis; venis externis albis, conspicuis, extus secus sulcos apertis; ascis pedicellatis, 1-5- plerumque 4-sporis; sporidiis ellipsoideis, acute echinulatis, 25-48 × 15-31.

Hab. sub Tiliis prope Minneapolis Minn. Amer. bor.

7. *Tuber rapæodorum* Tul. — Syll. VIII, p. 890 — var. *Klotzschii* 5298 P. Henn., Kryptog. Fl. v. Brandenb. (1905) p. 156, p. 159, f. III. — Ascomate subgloboso-nodoso, plicato-foveolato, 0,5-1,5 cm. d.; ascis ovoideis v. late clavatis, sæpe petiolatis, 65-90 × 45-65, 2-4-sporis; sporidiis ellipsoideis, 25-38 × 20-25; membrana brunnea, reticulata.

Hab. ad terram humosam sub *Æsculo Hippocastano*, Schöneberg prope Berolinum Germaniæ (KLOTZSCH).

8. *Tuber argentinum* Speg. — Syll. VIII, p. 893 — var. *Andarum* 5299 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 423. — Ascomate plus minusve profunde delitescenti, 5-15 cm. prof., candido sed tacto mox sordide rufescenti, odore saporeque fungino (non alliaceo) dulci sat intenso ac grato donato.

Hab. abunde in dunis inter radices *Discariæ* longissimæ prope Adolfo Alsina, Pampa Centrali, Argentina America austr.

HYDNOBOLITES Tul. — Syll. VIII p. 879.

1. *Hydnobolites javanicus* v. Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5300 CXVII (1908) Abt. I, p. 1020. — Hypogæus, irregulariter tuberosus, depresso verrucoso-pustulatus, extus flavidus, intus pallidior, 13 mm. latus, 10 mm. altus, opacus, subvelutinus; carne molli, venis sterilibus nullis, ex hyphis hyalinis, 10-12 μ . latis, regulariter tenuiterque tunicatis constituta; ascis numerosis, arcte gregariis, elongato-clavatis, 120 \times 60, 1-3-sporis; sporidiis globosis, pallide griseo-brunneolis, 26-32 μ . diam., tunica duplici 1,5-2, μ . cr., aculeis 4 μ . long.; peridio tenui parum dissimili, ex hyphis flavidis, crebre septatis apice subclavatis, usque ad 16 μ . lat. constituto.

Hab. ad terram in silva primæva Tjibodas in ins. Java.

2. *Hydnobolites californicus* Ed. Fischer, Fedde Repertorium VII 5301 (1909) p. 194. — Tuberosus, plus minusve gibberosus, poris rimisque apertus, basi distincta destitutus; superficie pseudoparenchymatica, primum albida, demum subfuliginea; gleba interna albida v. griseo-albida, canaliculis labyrinthicis ad superficiem fungi hiantibus pertusa; ascis per totam fungi carnem inordinate inspersis, ellipsoideis c. 80-100 \times 50-70; sporidiis globosis, 14-17 μ . cr.; episporio flavescenti reticulo instructo, angulis in aculeos 2-3 μ . long. protractis.

Hab. ad terram in California America bor.

TERFEZIA Tul. — Syll. VIII p. 902, XI p. 445, XIV p. 826, XVI p. 812, XVIII p. 205.

1. *Terfezia hispanica* Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. 5302 Fis. y Nat. Madrid (1908) Extr. p. 17, tab. II, fig. 13-22, t. IV, fig. 35-39. — Ascomatibus tuberiformibus forma et magnitudine variabilibus, subglobosis, subellipsoideis v. subcordatis, basi sæpe in pedicellum crassum usque ad 2 cm. long. productis, a 2,5 usque ad 10 cm. lat., superficie rubro-ochraceo-brunnea, hinc inde pallescenti, opaca, cortice parum distincto; carne roseola rubro-maculata; ascis ellipsoideis irregularibus, pressione subpolygoniis.

Hab. in Hispania fere tota et verisimiliter etiam in Lusitania.

— Edulis; odore et sapore characteristico nullo. — A *T. Leonis* et *T. rosea* Torr. distincta. — Var. *turbinata* Lázaro é Ibiza, l. c, p. 21. — A typo differt basi cuneata v. etiam subpedicellata. — Cum typo in Hispania.

2. *Terfezia Metaxasi* Chat. La Truffe p. 78. t. XIII, f. 2. — Asco- 5303

matibus globoso-depressis, basi breviter et obtuse acutatis, levibus, e griseo flavidis, gleba homogœnea, flavicante; ascis globosis, pleurumque 6-sporis (numquam 8-sporis); sporidiis 30-32 μ . diam., sordide flavidis, spinulis seu verrucis cylindræeis apice truncatis dense tectis, intermixtis tenuioribus.

Hab. in arenosis, Bagdad in Mesopotamia forte ad Cistos (METAXAS). — Vulgo *Kamé* (niger).

3. *Terfezia Boudieri* Chat. — Syll. XI, p. 445 — var. *Auzepii* Chat. 5804
Bull. Soc. Bot. Fr. (1893) p. 303. — A typo imprimis dignoscitur sporidiorum verrucis depressis sed multo latioribus, qua congruit cum var. *arabica Terfeziæ Boudieri*, quæ vero sporidiis gaudet majoribus (26-30 μ . diam.) nec tantum 20-25 ut in typo et in var. *Auzepii*.

Hab. ad terram prope Chonca in Caucaso (AUZEPI). — Vulgo *Touboulane*.

4. *Terfezia Pinoyi* R. Maire, Not. myc., Ann. Myc. vol. IV (1906) 5805
p. 332 et Bull. Soc. Myc. Fr. LIV (1907) p. CXCIV. — Ascomate subgloboso vel complanato, stipite nullo vel subnullo, extus ex albido sordide lutescente; pellicula tenui, levi, sæpius tessellato-rimosa; gleba alba, venis concoloribus raris; ascis ovoideis, octosporis, stipite longiusculo, rarius subnullo præditis, 80-140 (ped. incl.) \times 52-70; pedicello 5-65 \times 8-12; sporidiis globosis, hyalinis, episporio tenui, subtilissime verruculoso vel reticulato, rugoso, 16-19 μ . diam., grosse guttulis.

Hab. ad radices *Plumbaginis* albicantis in argilloso-sabulosis Sidi-Khalifa pr. Kreider Algeriæ. — Habitus glebæ fere *Tirmanicæ* sed sporidia globosa et basis sterilis nulla.

5. *Terfezia Deflersii* Patouill., Journ. de Bot. VIII (1894) p. 154. — 5806
Nigra quandoque rubescens; cute crassa, 1-1,5 mm.; carne rubra albo-venata; sporidiis sphaeroideis, hyalinis, 20-25 μ . diam., verrucis latis truncatis nonnullis minoribus immixtis.

Hab. ad terram prope *Helianthemum* Lipsii, El Aryscht Tunisia (DEFLERS). — *T. Metaxasi* affinis sed differt cute crassiori et sporis minoribus; a *T. Leonis* colore et magnitudine.

6. *Terfezia rosea* (Tul.) Torrend in Bull. Soc. port. Sc. nat. I (1908) 5807
pag. 180. Sub hoc genere adnumeranda esset *Delastria rosea* Tul. — Syll. VIII, p. 905 — teste cl. Torrend l. c.

DELASTREOPSIS Mattirolò, Bol. Soc. Brot. XXI (1905) p. 10 [extr.]
(Etym. *Delastrea*, cui affinis). — Peridium pseudo-parenchymati-

cum. Asci oblongi, pedicellati, parietibus crassis præditi, 1-3 raro 4 sporidia foventes. Sporidia areolato-reticulata muricata. Characteribus variis tam ad *Delastriam* quam ad *Terfeziam* et *Tuber* nutat.

1. *Delastreopsis oligosperma* (Tul.) Matt. Bol. Soc. Brot. XXI (1905) 5308 p. 10. Ita vocanda est *Terfezia oligosperma* Tul. — Syll. VIII, p. 904.

Fam. 10. Endogonaceæ

SPHÆROCREAS Sacc. et Ellis, Michelia II, p. 582. Cfr. Syll. IV, p. 648 (non = *Stigmatella*, teste v. Höhnel). Ad hoc genus referendæ sunt species sequentes sec. cl. v. Höhn. in Sitzungsber. d. k. Akad. d. Wissensch. Wien, CXVIII. Abt. I, Apr. 1909, p. 401: *Sphærocreas pubescens* Sacc. et Ell.; *Sph. Dussi* (Pat.) v. Höhn. (*Ackermannia Dussi* Pat.); *Sph. coccogenum* (Pat.) v. Höhn (*Ackermannia coccogena* Pat.); et sequens *Sph. javanicum* v. Höhn.

1. *Sphærocreas javanicum* v. Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5309 Bd. CXVII (1908) Abt. I, p. 104, fig. 1. — Ascomatibus globosis, duriusculis, opacis, e sordide flavis griseo-viridibus, 500-600 μ . d., apice verruca conica 150-200 μ . lata et alta auctis, sæpe vertice iterum corpusculo sphæroideo addito; contextu hyphenchymatico ex hyphis 4-8 μ . cr., septatis, hinc inde laxiusculis constituto, peripherice in ascos ex ovoideo elongatos 60-90 \approx 20-50 inflatis; ascis nonnullis minute granuloso-farctis; sporidiis genuinis non visis.

Hab. ad terram inter ligna ramulosque putrescentes, in Horto bot. Buitenzorg in ins. Java.

Dubiæ sedis.

BYSSOCHLAMYS Westl. in Svensk Bol. Tidskrift II, 2 (1909) p. 134 (Etym. *byssus* et *chlamys* pro chlamydospora). — Mycelium floccosum niveum, repens, hyphis plurinucleatis. Ascoma nullum. Asci nudi, subsessiles, conglomerati, octospori. Chlamydosporæ in apice hypharum tantum formatæ. Conidia catenata (fere *Oosporæ*) conidiophoris brevibus plerumque simplicibus. — Genus inter Endogonaceas et Gymnoascaceas fere medium.

1. *Byssochlamys nivea* Westl., l. c. tab. 4. — Hyphis septatis, ra- 5310

mosis tenuibus, hyalinis 2-5 μ . cr., levibus, sinuosis; ascis subgloboso-ovoideis, 6-16 \times 5-12; sporidiis ovoideis, levibus, 3,5-5 \times 3-4; chlamydosporis piriformibus, 5-12 \times 4-10, tunica crassa, levi, primo hyalina, dein subfusca; conidiis levibus, ovoideis, 3-7 \times 3-6,5.

Hab. in peridio Geasteris coronati et in nonnullis herbis spiritu conservatis et deinde lente exsiccatis in Suecia.

Fam. 11. Helvellaceæ

Subfam. 1. Morchelleæ.

Sect. 1. Hyalosporæ.

MORCHELLA Dill. — Syll. VIII p. 8, X p. 1, XI p. 391, XIV p. 738, XVI p. 695, XVIII p. 2.

1. **Morchella patagonica** Speg. Myc. Argent. IV, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 442. — Ascomatibus ovoideis dense grosseque costato-reticulatis, isabellinis, intus vacuis, abrupte pedicello albescente 10-15 mm. alto, 5-6 mm. cr., levi, fistuloso impositis, 15-20 mm. long., 10-15 mm. cr., costis numerosis gyroso-reticulatis sat elevatis; ascis clavatis, apice rotundatis 140-150 \times 20, aparaphysatis; sporidiis ellipsoideis, octonis, 15-17 \times 10-11, minute 2-guttatis, levibus, hyalinis, in asci parte sup. oblique distichis v. subconglobatis.

Hab. ad terram muscosam, inter folia delapsa, Puerto Blest, Nahuel-Huapi, Argentina. — Jodi ope ascorum tunica tota cærulescit.

2. **Morchella costata** (Ventenat) Pers., Myc. Europ. I, p. 208, Bres., Fungi Trid. II, p. 42, t. 148, Vittadini, Funghi t. XIII, f. VI-VII, *Phallus costatus* Vent., Diss. Phall. p. 510 (1798). — Ascomate obovato-conico v. pyramidato, apice obtuso, sæpe quadrangulär-compresso, basi adnato, glabro, intus cavo alboque tomentoso, saturate olivaceo v. olivaceo-fuligineo, 7-12 cm. longo, 4-5,5 cm. lato, costis longitudinalibus elevatis, puberulis, raro anastomosantibus, sed rugis transversalibus junctis et areolas rhombeo-difformes efformantibus, saturatius coloratis; stipite cavo, albo, fragili, furfuraceo-floccoso, rugoso, basi bulboso-lacunoso, 4-5 cm. longo, apice 1-1,5 cm., basi 2-3 cm. crasso; carne alba, odore et sapore

gratis; ascis cylindraceis, basi flexuoso-stipitatis, jodo non v. leviter obturaculo cæruleo-tinctis; paraphysibus septatis, ramosis apice clavato et 8-10 μ . cr.; sporidiis ellipsoideis, hyalinis, 18-22 \times 12, membrana interna aurea.

Hab. in hortis Trento, alibique in Italia et Gallia.

3. *Morchella esculenta* (L.) Pers. — Syll. VIII, p. 8 — var. *lutescens* 5313 (Leuba) Sacc. et Trott., *M. lutescens* Leuba, Champ. comest. p. 89, tab. 44, fig. 1-4. — Solitaria; ascomate ovato-oblongo subconico, membranaceo, subcartilagineo, fragili, superne callose reticulato, luteo, intus cavo, subtus clauso; stipite curto, crasso, fistuloso, albido, basi crassiore, nudo; carne fragili, sapore grato.

Hab. ad terram campestrem, in vineis, vallibus in Helvetia, Germania, Italia, vulgaris. — Non diversa verisimiliter a typo vulgari *M. esculentæ*. — Var. *abietina* (Leuba) Sacc. et Trott. *M. abietina* Leuba, Champ. comest. p. 89, t. 44, f. 5-7. — Pileo medio ex albo griseo-fulvo, ovato, subconico, stipiti basi adnato, areolis rhombeis irregularibus, minutis dein ampliatis. — In graminosis montanis sub Abietibus, frequens, gratissime edulis. — Cl. Leuba, l. c. p. 91-92, breviter describit (sine figuris) sp. novas sequentes: *M. radicata*, *M. pratensis*, *M. canina*, *M. alba* (= *M. vulgaris* a. *albida* Boud.), *M. autumnalis*, quæ verisimiliter sunt meræ formæ *M. esculentæ*, *M. conicæ*, *M. costatæ*.

4. *Morchella rigida* (Krombh.) Boud., Bull. Soc. Mycol. Fr. (1897) 5314 pag. 137, *M. conica* var. *rigida* Krombh. Abbild. der Schwämme III, p. 10, t. XVI, f. 13 et t. XVII, f. 1-2. — Media, 7-15 cm. alta, ascomate omnino adnato, conico dein oblongo, flavo-ochraceo, ut in *M. rotunda* sed magis elongato alveolisque longioribus, minus rotundatis, subseriatis, minus profundis, sepimentisque tenuioribus; sporidiis paullo crassioribus, 20-24 \times 13-14; stipite albido basi incrassatulo.

Hab. ad terram in Gallia, Italia, Bohemia.

5. *Morchella rotunda* Fr. — Syll. VIII, p. 9 (ut var.) — var. *alba* 5315 Mérat, Fl. paris. I, p. 233. — Ascomate toto albo, senio flavicante dignoscitur.

Hab. ad terram in Gallia.

6. *Morchella deliciosa* Fr. — Syll. VIII, p. 10 — var. *elegans* Boud. 5316 Bull. Soc. Mycol. Fr. (1897) p. 144, *M. conica* Krombh. t. XVI, f. 9 et Barla Champ. Nice, tab. 42, f. 10, non Auct. — Multo elatior, 10-20 cm. alta; stipite grosse furfuraceo; alveolis majoribus et magis irregularibus.

Hab. ad terram Nicææ (Nizza) et Chartres Gallia, rarior.

7. *Morchella elata* Fr. — Syll. VIII, p. 10. — var. *Clusii* Istv., in 5317
Clus. Ic. fung. p. 55, t. IV, f. 2. — Ascomate apice minus acuto
et subrufescente.

Hab. in Pannonia. — Var. *purpurascens* Boud., Disc. d' Eur.
p. 32, Krombh. Abbild. und Beschr., fasc. III, t. XVI, f. 24 (*M.*
elata). — Vix ascomatis colore magis purpurascente dignoscenda.
— In Bohemia et Gallia.

HELVELLA L. — Syll. VIII p. 17, XI p. 391, XIV p. 740, XVI
p. 697, XVIII p. 3.

1. *Helvella lactea* Boud., Icon. Myc. t. II, pl. 226 (1906) Hist. et 5318
Classif. Discomyc. Europe (1907) p. 36. — Media, 4-6 cm. alta,
tota alba, lactea; ascomate trilobato, subtus glabro, concolori; sti-
pите ad basim paululo incrassato, sulcato, costis parallelis raro a-
nastomosantibus, sat regularibus; ascis octosporis, cylindraceis, ad
basim attenuatis, 250-280 \times 13-14; paraphysibus septatis, ad basim
divisis, ad apicem vix incrassatis, 6-7 μ . long.; sporidiis ellipsoi-
deis, albis, intus guttula oleosa media, crassa, raro granulis comi-
tantibus repletis, 16-17 \times 10-11.

Hab. ad terram argillaceam in silvis Blois et Meaux Gallia. —
Ab *Helv. crispa* differt statura minori, colore, stipite magis regu-
lariter cylindraceo, sporidiis minoribus.

2. *Helvella sulcata* Afz. — Syll. VIII, p. 20 — var. *pallidipes* Boud., 5319
Hist. et Classif. Discomyc. Europe (1907) p. 35. — A typo differt
statura minori et stipite albo v. albescente.

Hab. in Gallia præcipue meridionali.

3. *Helvella constricta* Boud., Hist. et Classif. Discom. Europe (1907) 5320
p. 36. — Minor, 3-5 cm. alta; ascomate bi- v. trilobo, nigro-ci-
nereo-fusco, minus anguloso; stipite sulcato albido vel albido-
cinereo.

Hab. ad terram pr. Nicæam (Nizza). — *Helv. sulcatæ* affinis
a qua præcipue differt sporidiis majoribus, ascomate minus expanso.

4. *Helvella Queletiana* Sacc. et Trav. — Syll. XIX, p. 850. — Ita 5321
vocetur *Helvella phlebophora* Sacc. — Syll. VIII, p. 20 [= *H.*
venosa Quél.], non Pat. et Doass.

5. *Helvella Cookeana* (Boud.) Sacc. et Trav. — Syll. XIX, p. 844 — 5322
Leptopodia Cookeana Boud., Icon. Mycolog. t. II, pl. 236, Hist. et
Class. Discom. Europe pag. 37 (1907), *Helvella ephippium* Cooke

Mycogr. n. 169, non Lév. — Media, robustior, pileo bi- aut trilobo, subtus et stipite brunneo-fulvis, villosis, hymenio saturatiore; ascis elongatis cylindraceutis, octosporis, 380-400 \times 18-20; paraphysibus ad apicem paululum incrassatis, 5-8 μ . spissis, fulgineis; sporidiis ellipsoideis intus guttula oleosa magna et guttulis minoribus repletis, 22-25 \times 9-10; ascomatis pilis exterioribus septatis, fulgineis, 100-150 \times 10.

Hab. ad terram argillaceam loco? — Ab *Helv. ephippio* statura majore, colore obscuriore, pubescentia magis distincta diversa.

6. *Helvella murina* (Boud.) Sacc. et Trav. — Syll. XIX, p. 849 — 5923
Leptopodia murina Boud., Icon. Mycol. pl. 481, Hist. et Class. Discom. Europe pag. 37 (1907). — Media, 2-5 cm. alta, tota cinerea, subtus cum stipite villosulo, hymenio concolore; ascomate bilobo, deflexo; stipite pleno, elongato, ad summam basim tantum pallido et sæpe sulcato; ascis clavatis, octosporis, ad basim paululum attenuatis, 360-370 \times 24-30; paraphysibus simplicibus aut inferne tantum divisis, sub lente composita hyalinis, ad apicem clavulatis, 5-10 μ . spissis; sporidiis ellipsoideis, intus guttula magna media lutescente et guttulis minutis numerosis, ad apices positis repletis, 21-22 \times 12-13.

Hab. ad terram argillaceam in silva Carnelle, Gallia. — *Helv. ephippo* affinis, a qua differt statum majori, colore uniformiter griseo, hymenio concolori, non fusco sporidiisque. — Var. *Huyoti* Boud., l. c. pag. 38. — A typo recedit stipite breviori, 2-3 cm. longo, ascomate majori usque ad 3 cm. lato, minus pezizoideo magis helvellaceo, extus pallidiore, fere glabro; stipite pubescenti, hymenio concolori; sporidiis minoribus 18-20 \times 10-12; paraphysibus minus clavulatis apice tantum subincrassatis. — Prope Lagny (Seine-et-Marne) Gallia (M. HUYOT).

7. *Helvella tremellosa* Krombh., Abbild. und Beschreib. fasc. III, 5924
 pag. 31, t. XXI, fig. 7-8, ? *H. tremelloides* Hazsl. Rend. Kōgg. t. III, f. 4. — Ascomate lobato, irregulari, fulvo-fusco, lobis irregulariter deflexis, connatis, undulatis; costis primariis magnis, angulatis, rotundatis, secundariis minutis gyrosis, planiusculis; areolis irregularibus, profundis, celluliformibus v. planiusculis, fundo inæquali, lacunoso-costato, pallido; stipite irregulari, confluenti, albo, tremellosa-ceraceo, fragili, subfarcto, dein cavo, ramoso; ramis irregularibus, subcompressis, subasperis; mycelio tenui, albo.

Hab. ad terram in silva densa pr. Bukowan Bohemiæ.

Helvellæ species incertæ sequentes enumerantur in Syll. XIX, p. 851:

Helvella bicolor Raddi — *H. inflata* Cumino — *H. reflexa* Cumino
— *H. tomentosa* Raddi — *H. undulata* Raddi.

VERPA Sw. — Syll. VIII p. 29, XIV p. 741, XVIII p. 6.

1. *Verpa perpusilla* Rehm, Ann. Mycol. VII (1909) p. 526, Ascom. 5325

Exsicc. fasc. 45, n. 1857. — Ascomatibus gregariis, e mycelio al-bido subterraneo exortis, erectis, stipitatis, obtuse campanuliformi-bus, apice sæpe impressis, acute haud involute marginatis, haud corrugatis, extus subfuscis, 0,5-1 cm. alt., 2 cm. lat.; subtus cum stipite in medio inserto, plus minusve cylindrico, 3 mm., versus basim 5 mm. lat., ibique subcompresso, solido, glabro, 1,5-5 cm. alto, flavide albidis; ascis cylindraceis, apice rotundatis, c. 200 × 14, 8-sporis; sporidiis ellipsoideis, utrinque obtusis, 1-cellularibus cum gutta magna oleosa centrali, hyalinis, 15-20 × 9-10, monosti-chis; paraphysibus filiformibus, 3 μ . cr., versus apicem sensim usque ad 8 μ . lat., hyalinis.

Hab. inter Larices et Abietes, Blaniks Goods Algoma Wisc. America bor. (DODGE).

UNDERWOODIA Peck — Syll. X p. 1.

1. *Underwoodia Campbelli* Sacc., Ann. Mycol. VII (1909) p. 433. — 5326

Magna, fasciculata, albo-lactea, carnosæ, sparassoides, ex laminis varie inflexis et longitrorsum connexis (ad instar stipitis *Helvellæ lacunosæ*) formata, hinc lacunoso-costata, ubique ascigera; hyme-nio 1 mm. cr., strato subhymeniali celluloso modo crassiusculo modo tenuissimo; ascis cylindricis longissimis, 270-320 × 7-8, p. sporifera 70-80 μ . longa, apice obtusis, operculatis, deorsum leni-ter tenuatis, octosporis; paraphysibus bacillaribus, apice vix in-crassatis, pluriguttulatis, hyalinis; sporidiis oblique monostichis, ellipsoideis, 11-12 × 5,5-6, vix asperulis, intus granulosis, hyalinis.

Hab. in areis carbonariis derelictis, probabiliter ex fragmentis ligneis infossis enascens in silvis fagineis prope Sora (Caserta) Junio 1909 (Prof. C. CAMPBELL). — Cæspites usque ad 15-18 cm. crassi. Asci in hymenio non semper parallele stipati, sed sæpius in fasciculos distinctos suborbiculares juncti. Tam hæc species quam typica (*A. columnaris* Peck) videntur paradoxæ; scilicet *Helvellæ* v. *Gyromitræ* species ascomate orbata, stipitibus vero maxime evo-lutis confluentibusque; mirum vero stipites hos (revera pseudosti-pites!) omnino et ubique superficialiter ascigeros esse!

Subfam. 2. Geoglosseæ (*).

Sect. Hyalosporæ.

MITRULA Fr. — Syll. VIII p. 32, X p. 1, XI p. 392, XIV p. 741, XVI p. 697, XVIII p. 6.

1. *Mitrula phalloides* (Bull.) Chev. — Syll. VIII, p. 33 — var. *aurantiaca* (Cumino) Boud. Ic. Mycol. III, pl. 427 bis (1909) *Helvella aurantiaca* Cum., Fung. Vall. Pisii in Act. Acad. Taur. (1805) p. 221, *Leotia uliginosa* var. *aurantiaca* (Cum.) Pers. Myc. Europ. I, p. 201. — Ascomate exiguo, convexo, aurantiaco, carnosogelatinoso, stipite albo-rubescente, fistuloso.

Hab. in truncis et ramis putridis in rivulis, Pesio Pedemontii et in Gallia.

MICROGLOSSUM Sacc. — Syll. VIII p. 39, X p. 2, XI p. 392, XIV p. 742, XVI p. 698, XVIII p. 6.

1. *Microglossum fusco-rubens* Boud., Icon. Mycol. t. III, pl. 426 (1909), Hist. et Classif. Discomyc. Europe (1907) p. 87. — Elatum, 7-9 cm. altum, fulvo-olivaceum, pediculo ad basim saturatiore fulvo-rubiginoso; clavula elongata, medio sulcata ad apicem attenuata, a stipite bene limitata; pediculo clavula brevior; ascis parvis, octosporis, claviformibus, 100-130 \times 10-12; paraphysibus linearibus ad apicem clavulatis, sub lente composita hyalinis, simplicibus aut ad basim divisis, 3-5 μ . cr.; sporidiis oblongo-fusoides, albis, intus 4-6-guttulis oleosis granulis comitantibus repletis, non septatis, 20-21 \times 4-4.5; carne ochracea.

Hab. ad terram argillaceam in silvis prope Montmorency Galliae. — *M. lutescenti* affinis sed differt colore ferrugineo, clavula longiore, paraphysibus minus clavatis etc.

2. *Microglossum longisporum* Durand, Ann. Mycol. VI (1908) p. 409, fig. 17-18, 206-206 a. — Ascomatibus gregariis, clavatis, multiformibus, 3-6 cm. altis; clavula oblonga v. elliptica, obtusa, compressa, sæpe sulcata, cinnamomeo-umbrina, 1-2.5 cm. long., 4-10 mm. lata; stipite tereti squamuloso, sæpe denique glabro nitente,

(*) De hac subfam. cfr. monographiam A. J. DURAND, *The Geoglossaceæ of North America*, in Ann. Mycol. vol. VI (1908) pp. 387-477, cum 222 fig.

cinnamomeo æquali, 2-4 cm. longo, 2-4 mm. lato; ascis cylindraceo-clavatis, apice rotundatis, poro J. cærulescente, 100-140 \times 12-15, octosporis; sporidiis biformibus, duobus longis, parallele positis, levibus, cylindraceis, demum 14-16-septatis, 60-100 \times 4-5, sex brevibus similibus, continuis, ad apicem asci irregulariter positus, 12-18 \times 3; paraphysibus filiformibus, 2 μ . cr., hyalinis, sursum leniter incrassatis, fortiter curvatis.

Hab. ad terram herbosam, New York, North Carolina, Michigan Amer. bor. — Ob bina sporidia septata et sena continua species ambigit inter *Microglossum* et *Leptoglossum*.

NEOLECTA Speg. — Syll. VIII p. 40.

1. *Neolecta aurantiaca* Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV 5380 (1905) p. 11. — Fungus omnino immaturus. Est potius *Clavaria* sp. ex ipso Auctore, confirmante cl. v. Höhnelt.

CUDONIELLA Sacc. — Syll VIII p. 41, XI p. 392, XVI p. 698, XVIII p. 7.

1. *Cudoniella Allenii* A. L. Smith, Trans. Brit. Mycol. Soc. 1907, 5331 v. III (1908) p. 40, tab. I, fig. 10 a-d. — Sparsa v. subgregaria, minuta, circ. 2 mm. alt., 1,5-2 mm. lata, æruginea; ascomate cæraceo, convexo, subtus concavo, levi; stipite brevi, externe subochraceo v. subærugineo, interne hyalino-ochraceo; ascis oblongo-clavatis, versus basim attenuatis, 100 \times 8; sporidiis oblongis leniter curvatis, continuis dein pluri-plerumque 6-septatis v. pseudo-septatis, 17 \times 3, subærugineis dein hyalinis; paraphysibus filiformibus ramosis, ad apicem minute globosis 2,5 μ . diam.; disco et hymenio colore ærugineo suffuso.

Hab. ad ligna vetusta, Shropshire, Britannia (W. B. ALLEN).

2. *Cudoniella coniocyroides* Rehm, Ann. Mycol. V (1907) p. 533. — 5332 Ascomatibus sparsis, clavato-stipitatis, convexo-pileiformibus, margine subinvolutis, lacteis, glabris, ca. 400 μ . latis; stipite subcylindraceo, recto, levi, versus basim attenuato, 1,2 mm. alto, superiore parte flavidulo, 180 μ . lato, inferiore fuscidulo 120 μ . lato, glabro, contextu prosenchymatico ex hyphis parallelis flavidulis; ascis clavatis, apice rotundatis, 25-30 \times 4,5-5, octosporis; sporidiis subclavatis, 1-cellularibus, 5-6 \times 1,2-2, hyalinis, distichis; paraphysibus filiformibus, hymenium superantibus, hyalinis, 1,5 μ ., versus apicem 2-3 μ . crassis.

Hab. ad acus Pini silvestris putridos inter *Vaccinia*,

Pfaffenstein in Helvetia saxonica (FEURICH). — *Minutula*, habitu *Coniocybis*.

LEPTOGLOSSUM Cooke em Sacc. — Syll. VIII p. 47, XI p. 392, XIV p. 743, XVIII p. 8.

1. *Leptoglossum robustum* (Durand) Sacc. et Trav. — Syll. XX, p. 83 5333
— *Corynetes robustus* Durand, Ann. Mycol. VI (1908) pag. 416, fig. 40-44, 198-202. — Ascomatibus gregariis v. cæspitosis, atris, robustis, 2,5-8 cm. alt.; clavula brunneo-olivaceo tincta, obtusa, 1-3 cm. longa, 6-15 mm. lata, compressa v. sulcata; stipite tereti, brunneo-atro, glabro, nitenti, sursum leviter squamuloso, 1-4 cm. longo, 3-8 mm. lato; ascis clavatis, crassis, subsessilibus, apice contractis, poro J. cærulescenti, 100-150 \times 10-12 (plurimis 120-135 μ .), octosporis; sporidiis sursum distichis, hyalinis, levibus, cylindræis, multiguttulatis, demum 7-11-septatis, 25-50 \times 4-6 (30-40 μ .); paraphysibus hyalinis, filiformibus, 2-3 μ . cr., apice leniter incrassatis et curvatis, non v. leniter sursum cohærentibus.

Hab. ad terram sabulosam inter folia dejecta, Maine, Mississippi Amer. bor.

2. *Leptoglossum fumosum* Peck, Mus. N. Y. Nat. Hist. Bull. n. 116 5334 (1907) p. 25, *Microglossum fumosum* (Peck) Durand in Ann. Myc. VI (1908) p. 408, t. V, f. 15-16 et t. 19, f. 203-205. — Ascomatibus solitariis v. sæpius cæspitosis, clavatis, 2-6 cm. alt., parte ascigera obovata, elliptica v. oblonga, apice rotundata, plus minus compressa et longitud. sulcata, tertiam v. mediam partem ascomatis formante, satis discreta a stipite, e fumoso fulvescente, 0,7-3 cm. longa, 3-12 mm. lata; stipite tereti v. subcompresso 1-3 cm. long., 3-5 mm. cr., argillaceo, squamuloso v. glabrescente et nitidulo, intus plurilacunoso; ascis clavatis 100-150 \times 10-12, obturaculo jodo cærulescente, octosporis; sporidiis biseriatis, cylindricis, leviter curvis, initio continuis, denique 7-15-septatis, hyalinis, levibus, utrinque subrotundatis.

Hab. ad caudices putrescentes, Massachusetts et New York Amer. bor.

GEOGLOSSUM Pers. — VIII p. 42, X p. 2, XIV p. 743, XVI p. 699, XVIII p. 9.

1. *Geoglossum fallax* Durand, Ann. Mycol. VI (1908) p. 428, f. 61- 5335 64, 133-137. — Ascomatibus solitariis, clavatis, fulvis v. umbrinis, 2-8,5 cm. altis; clavula lanceolata, obtusa, compressa, 8-15 mm.

long., 3-5 mm. lata; stipite gracili, tereti, sursum squamuloso, 1-2 mm. crasso; ascis cylindraceo-clavatis, apice contractis, poro J cærulescenti, 150-175 \times 15-18, octosporis; sporidiis subdistichis, cylindraceo-clavatis, primo continuis et multiguttulatis, demum 7-12-septatis, 65-105 \times 5-7 (plurimis 80-100 μ .), longe hyalinis demum fuligineis; paraphysibus filiformibus, hyalinis, septatis, sursum curvatis v. circinatis, apicibus abrupte ellipsoideis v. globosis 5-6 μ . cr.

Hab. ad terram argillosam in silvis, New York et Michigan Amer. bor.

2. *Geoglossum pygmæum* Gerard in Durand, Ann. Myc. VI (1908) 5386 p. 429. — Ascomatibus pusillis, 0,5-2 cm. altis, exsiccatis brunneo-atris; clavula tenui, compressa; stipite gracili, leniter pilis fuscis septatis obsesso; ascis cylindraceo-clavatis, 175-200 \times 17-18, octosporis; sporidiis parallele positis, fuligineis, cylindraceo-clavatis, 15-septatis, 122-140 \times 6-7; paraphysibus rectis, filiformibus, deorsum hyalinis, rare septatis, 3 μ . crassis, sursum clavatis, fuligineis, septatis, constrictis, cellulis 12-14 μ . long., cellula terminali piriformi v. elliptica, 10-14 \times 7-8.

Hab. ad terram detritis ligneis mixtam, Poughkeepsie N. Y. Amer. bor. (W. R. GERARD).

3. *Geoglossum intermedium* Durand, Ann. Mycol. VI (1908) p. 431, 5337 fig. 66-67, 142-144. — Ascomatibus solitariis, atris, 3-4,5 cm. altis, clavula oblonga v. ovato-lanceolata, compressa, obtusa, 0,75-1,5 cm. longa, hymenio exsiccato alveolato; stipite gracili, tereti flexuoso, brunneo-atro, 0,75-1 mm. crasso, sursum pilis flexuosis, septatis, brunneis obsesso; ascis cylindraceo-clavatis, J. cærulescentibus, 150-200 \times 20, octosporis; sporidiis bi-multiseriatis, crassis, clavatis, obtusis, longe hyalinis, demum pallide brunneis, 7-11-septatis, 55-75 \times 6; paraphysibus filiformibus, subhyalinis, rectis, raro septatis, sursum clavatis, apice subpyriformibus v. subglobosis, apicibus cum ascis coherentibus epithecium brunneum formantibus.

Hab. in paludosis Knoxbora N. Y. (H. S. JACKSON) et in ligno putri Guelph Amer. bor. Ontario (J. H. FAULL).

4. *Geoglossum cohærens* Durand, Ann. Mycol. VI (1908) pag. 430, 5338 fig. 65, 138-139. — Ascomatibus clavatis, atris, 2,5-3,5 cm. altis; clavula tereti v. compressa, obtusa; stipite squamuloso; ascis clavatis, 150 \times 12-15; sporidiis inordinatis, cylindraceo-clavatis, longe hyalinis, demum pallido-brunneis, 0-7-septatis, 40-55 \times 5; paraphy-

sibus numerosis, filiformibus, ascos superantibus, raro septatis, apice abrupte clavatis v. piriformibus, brunneis, apicibus cohærentibus epithecium brunneum supra ascos formantibus

Hab. ad terram sabulosam, Newfield New Jersey Amer. bor. (J. B. ELLIS).

5. ? *Geoglossum diffusum* Kütz., Philos. Bot. (1852) t. XX, fig. 1. 5389 (Verisimiliter idem ac *G. ophioglossoides*).

6. *Geoglossum Barla* Boud., Bull. Soc. Myc. Fr. (1888) p. 76, t. XVI, 5340 f. 1, Icon. Mycol. III, t. 424, Discom. Europ. p. 86. — Nigro-olivaceum, 3-5 cm. alt., clava compressa, glabra, sublinguiformi, 1-2 cm. lata; stipite pallidiore ad apicem nigro-furfureo; hymenio nigro-olivaceo, levi, non v. vix jove pluvio viscido, a stipite discreto, clavam intus plenam et fuliginosam tegente; ascis clavato-fusoideis, ad basim attenuatis et flexuosis, 300-320 \times 18-20, paraphysibus fuliginosis septatis, simplicibus v. inferne divisis, filiformi-clavulatis, sursum torulosis et eximie spiraliter contortis aut undulatis, ibique 6-10 μ . cr.; sporidiis fuliginosis cylindraceis, uno apice sensim attenuatis, rectis curvulisve, 7-septatis, 85-95 \times 6-7, intus granulosis.

Hab. ad terram argillaceam pr. Nicæam (BARLA) et Blois Galliae (BOUDIER). — Ut monui in Syll. VIII, p. 45, forte tantum varietas *G. umbratilis* Sacc.

Subgen. *Gleoglossum* Durand. Ascomatibus viscidis.

7. *Geoglossum affine* (Durand) Sacc. et Trav. — Syll. XIX, p. 756 5341 — *Gleoglossum affine* Durand, Ann. Mycol. VI (1908) p. 421, fig. 73-74, 165-167. — Ascomatibus gregariis, atris, viscidis, 1,5-2,5 cm. alt.; clavula oblongo-clavata, obtusa, compressa; stipite gracili, levi; ascis clavatis, 7-septatis, 43-65 \times 5-6; paraphysibus filiformibus, 2,5 μ . cr., sursum clavatis, septatis, curvatis, fuliginosis, cellulâ apicali abrupte elliptica v. globosa, 7-8 μ . cr., cellulis inferioribus aut cylindraceis aut nodulosis aut sæpe moniliformibus, stipitem usque ad basim tegentes.

Hab. ad terram humosam, New York Amer. bor.

TRICHOGLOSSUM Boud., in Bull. Soc. Myc. Fr. I (1885) p. 109, *Geoglossum* subgen. *Trichoglossum* (Boud.) Sacc. Syll. VIII, pag. 45 (Etym. *thrix* trichos pilus et *glossum* pro *Geoglossum* h. e. *Geoglossum pilosum*).

1. *Trichoglossum hirsutum* (Pers.) Boud. — Syll. VIII, p. 46 (*Geo-* 5342
glossum). — Var. *Doassansi* Patouill., Bull. Soc. Myc. Fr. XXV
(1909) p. 129. — A typo differt sporidiis minoribus et parcius
(7-) septatis, cylindraceis, rectis, brunneis, 85-95 \times 4-5.

Hab. in silva Gourzy pr. Eaux-Bonnes in Pyrenæis Galliæ (DOASSANS). — Var. *variabile* Durand, Ann. Mycol. VI (1908) p. 437,
fig. 84-85, 182-184. — Sporidiis variabilibus, 80-150 μ . long., 8-
14-septatis (plurimis 11-14-septatis); cetera ut in forma typica. —
Ad terram humosam, New York, Delaware, N. Carolina. — Var.
Wrightii Durand, l. c. p. 438, fig. 83, 174. — Sporidiis 110-140
 μ . long., crassis, 8-9-septatis; cetera ut in forma typica. — In in-
sula Cuba (WRIGHT).

2. *Trichoglossum gracile* Patouill., Bull. Soc. Mycol. Fr. XXV (1909) 5348
pag. 131. — Ascomatibus gregariis, atris, pusillis, 1-2 cm. altis,
undique hirsutis; clavula ovata, obtusa, minuta, 1-3 mm. long.,
 $\frac{1}{2}$ -1 $\frac{1}{2}$ mm. lata, compressa, setulis brunneis, rigidis, acutis, lon-
gissimis (300-400 μ .) valde prominenter obsita; stipite gracili, fili-
formi, æquali, flexuoso, hispido; ascis clavatis, octosporis, 120 \times
20, jodo cærulescentibus; sporidiis fusiformi-clavatis, utrinque sen-
sim attenuatis, 115-160 \times 5-6, transverse 15-septatis; paraphysibus
filiformibus, septatis, sursum fuligineis, vix incrassatis; cystidiis
brunneis valde elongatis.

Hab. in muscis truncorum, Nova Caledonia (LE RAT).

3. *Trichoglossum rasum* Patouill., Bull. Soc. Mycol. Fr. XXV (1909) 5344
p. 130. — Ascomatibus gregariis, magnis usque ad 15 cm. altis, atris;
clavula valde compressa, spathulata, lanceolata, sæpe inciso-cre-
nata, 3-5 cm. longa, 6-20 mm. lata, sub lente vix setulosa; stipite
gracili, 2-3 mm. crasso, tereti, flexuoso, hirsuto, setulis brun-
neis, rigidis, longiusculis, acutis; mycelio floccoso, brunneo, ex
hyphis gracilibus, tenuibus, ramosis formato; ascis cylindraceo-
clavatis, jodo cærulescentibus, 200 \times 20 circ. cr., octosporis; spori-
diis opacis, brunneis, clavatis, una fine abrupte acutatis, 7-9-se-
ptatis, crassis, 115-140 \times 7-9; cystidiis opacis, spiniformibus, vix
excedentibus, 260 \times 12; paraphysibus filiformibus, fuligineis, sursum
uncinatis, vix incrassatis (4 μ .).

Hab. ad terram quisquillasque in silvis montis Koghis Novæ
Caledoniæ (LE RAT). — *Th. Walseri* proximum.

SPATHULARIA Pers. — Syll. VIII p. 48, XIV p. 744, XVIII p. 10.

1. *Spathularia linguata* A. E. Johnson, Bull. Minn. Ac. Nat. Sc. I 5345

(1880) p. 370; Durand, Ann. Mycol. VI (1908) p. 462. — *Gregaria*, raro solitaria, 2,5-5 cm. alta, capitulo stipite magnitudine subæquante, 0,5-2 cm. lato; capitulo lingulato, tenui, compresso, subæquali, albo, v. albo et colore flavido v. ferrugineo picto; stipite albo v. flavido-albo, crasso, firmo; ascis elongatis, clavatis; sporidiis filiformibus, ascos longitudine fere subæquantibus, rectis v. curvis, multiguttulatis.

Hab. inter muscos in paludosis, Amer. bor. — Sec. Durand verisimiliter cum *Spath. clavata* comparanda.

VIBRISSEA Fr. — Syll. VIII p. 51, XI p. 392.

1. *Vibrissea foliorum* Thaxter in Durand, Ann. Mycol. VI (1908) 5846 p. 454, fig. 113. — Ascomatibus grégariis, stipitatis, mollibus; parte ascigera convexa, 1-1,5 mm. lata, luteo-aurantiaca; stipite pallido, 2-5 mm. longo, gacili, translucido, deorsum pilis obsesso; ascis gracilibus, cylindraceis, apice rotundatis, J. non cærulescentibus, 150-180 × 5-6; sporidiis 8, parallele positiss, hyalinis, filiformibus, 85-100 × 1; paraphysibus filiformibus, hyalinis, apice leniter piriformibus.

Hab. in foliis et cupulis quercinis emortuis, West Haven Conn. (R. THAXTER). — *V. truncorum* affinis sed valde distincta.

Fam. 12. Pezizaceæ

Sect. 1. Hyalosporæ.

SPHÆROSOMA Kl. — Syll. VIII p. 56, XVIII pag. 11. — Quoad genus et ejus synonymiam cfr. ROUPPERT *Revision du Genre Sphærosoma*, cum icon. et 2 tab. in *Bull. Acad. Sc. Crac.* (1908) p. 649 et (1909) p. 90 et SETCHELL in *Univ. of California Public. in Bot.* IV (1910) p. 114.

1. *Sphærosoma lanczewskianum* Rouppert, Bull. Ac. Sc. Cracovie 5347 (1908) p. 649, (1909) p. 90, f. 5-6. — Ascomatibus dispersis, subgloboso-discoideis 2-5 mm. diam., olidis, aurantiacis, basi solito latiore, rhizoidibus arenæ immixtis instructis, marginatis; hypothecio pseudoparenchymatico, hyphis ascogenis stratum subhymeniale formantibus, una cellula ascogena 40-56 μ . lata, periphysibus 8-10 μ . cr. hymenium cingentibus circumdata: ascis cylindraceis 8-

sporis, 220-270 \approx 18-24, hyalinis, paraphysibus multo longioribus, parte apicali superficiem hymenii formantibus, 300-320 \approx 4, ad apicem 6-8 μ . latis, guttulatis; sporidiis sphæroideis, hyalinis, immaturis vix ellipsoideis, echinulatis, 18-22 μ . d., echinulatis, 1-2 μ . long.

Hab. in terra arenosa prope fontem inter Gramina et Muscos, in Polonia ad Raciazek prope Vistulam fluvium. — *Sphaeros. echinulato* Seav. proximum, sed differt fabrica coloreque ascomatum, ascis cylindraceutis nec subclavatis, sporidiis minoribus, echinulis brevioribus, paraphysibus brevioribus et tenuioribus, guttulatibus, periphysibus.

RUHLANDIELLA P. Henn. — Syll. XVII p. 241. (Ex errore calami inter Hymenogastrea locata).

1. *Ruhlandiella hesperia* Setchell, Univ. of California Public. in Bot. 5348 v. IV (1910) n. 5, p. 116, tab. 15. — Ascomatibus cartilagineo-carnosis, dilute fuscis, hemisphæricis aut late reniformibus, 2-6 mm. diam., inferne brevi stipite aut paucis fasciculis mycelialibus suffultis, externis hymenio omnino vestitis, internis pseudoparenchymaticis; ascis cylindraceuto-clavatis, 200-250 μ . longit, 24-28 μ . diam., Jodi ope cærulescentibus, paraphysibus elongatis, gracilibus, lente aut passim moderate apice tumidulis, ad apices maxime curvatis et in gelatinæ strato pigmentato conglutinatibus multo quam ascis longioribus; sporidiis sphæroideis, dilutissime fuscis, irregulariter alveolatis, 21-25 μ . diam.

Hab. ad terram sub foliis Eucalypti sp. in Berkeley, California (N. L. GARDNER).

ACETABULA (Fr.) Fuck. — Syll. VIII p. 59, XVI p. 701, XVIII p. 13.

1. *Acetabula Barlae* Boud., Hist. et classif. Discomyc. Europe (1907) 5349 p. 40; Icon. Mycol. II, tab. 245. — Major, 3-5 cm. alta, totidem lata, ascomate cupulato, intus intense fuligineo-nigro, extus pallidore, minute furfuraceo-velutino; pediculo brevi, crasso, albido, costis dichotome ramosis ad dimidiam partem cupulæ productis et extremitatibus fuliginosis; ascis majoribus, cylindraceuto-clavatis, 360-380 \approx 16-20; paraphysibus pallide fuliginosis, ad apicem incrassatis, 8-9 μ . latis; sporidiis ellipsoideis, guttula oleosa media maxima et granulis majoribus repletis, 20-32 \approx 11-12.

Syll. fung. XXII (XII-1912)

Hab. ad terram pr. Nicæam [Nizza] (BARLA). — Ab *Ac. vulgari* et *ancili* colore obscuriore et sporidiis minoribus diversa.

2. *Acetabula longipes* (Boud.) Sacc. et Trott., *Cyathipodia longipes* 5350
Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39. — Major, 5-6 cm. alta, 4-5 lata, ascomate longe pedunculato, intus fulvo, extus pallidiore, tantum pruinoso, pediculo pallido, elongato, 5-6 mm. crasso, costato-sulcato, costis breviter sub cupula prominentibus non divisis, sursum pruinoso; ascis majoribus, 350-400 \times 20-24, octosporis; paraphysibus elongatis, pallidis, ad apices incrassatis, 7-10 μ . crassis; sporidiis ellipsoideis, majoribus, intus guttula oleosa media crassa et guttulis minoribus repletis, 20-24 \times 13-15.

Hab. ad terram, Lagny prope Parisios. — Inter *Cyathipodium* et *Acetabulam* media.

3. *Acetabula platypodia* (Boud.) Sacc. et Trav. — Syll. XIX, p. 4 — 5351
Cyathipodia platypodia Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39; Icon. Myc. II, tab. 241. — Minor 2-3,5 cm., ascomate fulvo-cinerecente, cupulato, extus concolore sed pallidiore, granuloso-puberulo; stipite late compresso, bicostato; ascis octosporis, cylindraceo-clavatis, 280-300 \times 15-18; paraphysibus elongatis, pallidis, ad apicem clavulatis, intus granulosis, clava 5-6 μ . cr.; sporidiis minoribus, ellipsoideis, achrois, intus guttula oleosa media crassa et rarius granulis paucis adjunctis repletis, 15-18 \times 12.

Hab. ad terram pr. Nicæam (Nizza).

GEOPYXIS Pers. — Syll. VIII p. 63, X p. 3, XI p. 393, XIV p. 744, XVI p. 702, XVIII p. 14.

1. *Geopyxis alpina* v. Höhn., Ann. Myc. III (1905) pag. 555, cum 5352
icon. — Ascomatibus sparsis, 3-8,5 mm. latis et altis, tenuibus, e cupulato suburceolatis, basi brevissime stipitiformi-angustatis, supra plerumque parum contractis, margine pallidiore, tenui, denticulato, intus extusque concoloribus, rubido-flavo-ochraceis, subglabris, subnitidis; ascis cylindraceis 300 \times 12; octosporis; sporidiis recte v. suboblique monostichis, hyalinis, late ellipsoideis, levibus, plerumque mucoso-vestitis, guttulatis, 15 \times 8-9,5; paraphysibus filiformibus 2-3 μ . cr., apice non incrassatis; contextu pseudoparenchymatico, cellulis circ. 12 μ . diam. J-.

Hab. ad terram calcaream parum humosam, Schneeberg Austriæ inf., 1400 m. alt.

2. *Geopyxis* ? *granulosa* P. Henn., in Voeltzkow Reise Ostafrika III 5353
(1908) p. 32, tab. III, fig. 27. — Ascomatibus singularibus, cam-

panulato-concatis, carnosus, extus pallide cinereis, granulato-verrucosis, margine crenulato-incisis c. 2-2,5 cm. diam., disco levi pallide olivaceo; ascis cylindraceo-clavatis apice rotundatis, octosporis, 180-230 \times 12-16; paraphysibus basi ramosis, filiformibus, ad apicem incrassatis, septatis, guttulatis, olivaceis, 2,5-3 μ . cr.; sporidiis ellipsoideis, hyalinis, levibus, 1-2-guttulatis, 8-11 \times 6-7.

Hab. ad terram muscosam, Fénérive Madagascar. — A typo generis ascomatibus extus granulato-verrucosis recedit.

3. *Geopyxis scabra* Rehm, Hedw. XXVIII (1889) p. 302, t. 7, f. 15. 5354

— Ascomatibus cyathoides, stipitatis; stipite 7 mm. alto, vix 2 mm. cr.; cupula 3 cm. lata, 1 cm. alta, glabra, cervino-fuscidula, punctulis albis maculata, margine integro prædita, disco pallide cervino; ascis cylindraceis, crassis, apice rotundatis, octosporis, 250 \times 18, paraphysibus ramosis, 2 μ . cr., hyalinis, apice haud conglutinatis obvallatis; sporidiis ellipsoideis, crasse tunicatis, 1-cellularibus, levibus, dilute flavidulis, intus granuloso-oleosis, 25-27 \times 12-14, monostichis.

Hab. ad lignum, patria ignota (ex herb. Berolinensi).

PEZIZA Dill. em. — Syll. VIII p. 73 et 511, X p. 3, VI p. 393, XIV p. 744, XVI p. 703, XVIII p. 16.

1. *Peziza gigantea* (Rehm) Sacc. et Trott., *Pustularia gigantea* Rehm, 5355

Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 517. — Ascomatibus cæspitosis, sessilibus, vix stipitiformiter elongatis, irregulariter urceolatis, margine demum undulato et plus minusve inciso, disco flavescente undulato, extus glabris, parenchymatice contextis, albescentibus, 12 cm. diam., siccis corrugatis, fuscescentibus, carnosus; ascis cylindraceis, apice truncatis, 300 \times 10, jodi ope totis cærulescentibus, octosporis; sporidiis oblongis, utrinque rotundatis, glabris, 1-cellularibus, haud guttatis, hyalinis, 10-12 \times 5-6, monostichis; paraphysibus filiformibus 2 μ ., versus apicem 3,5 μ . cr., dilute flavidulis.

Hab. ad terram, Machirac Island Mich. Amer. bor. (HARPER).

— A *Peziza vesiculosa* magnitudine ascomatis et sporidiis dimidio minoribus inprimis diversa.

2. *Peziza amplissima* (Boud.) Sacc. et Trav. — Syll. XX, p. 309 — 5356

Aleuria amplissima Boud., Icon. Myc. t. II, pl. 263; Hist. et Clas. Discomyc. Europe (1907) p. 44. — Maxima, 5-10 cm. lata, cupulata et subundulata, extus ad basim subglabra, pallida, ad marginem ochraceo-fuscescens aut lutescenti-ferruginea, grosse fur-

furacea et minute denticulata, hymenio fusco aut fusco-brunneo; ascis cylindraceis, pallide fuscescentibus, octosporis, $280-300 \times 14-16$; paraphysibus hyalinis, intus spumosis, ad apices clavulatis, $8-13 \mu$. crassis; sporidiis ellipsoideis, hyalinis, extus minutissime et vix perspicue granulosis, $16-18 \times 9-10$.

Hab. ad terram sabulosam in silvis Beauchamp et Isle-Adam Gallia. — *Aleuria amplissima* Fr. est *Pez. coronaria* Jacq.

3. *Peziza mirabilis* (Rehm) Sacc. et Trott., *Plicaria mirabilis* Rehm 5357 in Strasser Verh. k. k. zool.-bot. Ges. Wien LX (1910) p. 477; absque diagnosi. — Magna, hymenio obscure brunneo; sporidiis non guttulatis, levibus; paraphysibus supra incurvatis, brunneis.

Hab. in areis carbonariis, Sonntagsberg Austria.

4. *Peziza vesiculosa* Bull. — Syll. VIII, p. 83 — var. *apapophysata* 5358 Speg., Myc. Arg. IV, in Ann. Mus. Buenos Aires (1909) p. 442. — Tantum differt ascis semper paraphysibus destitutis.

Hab. ad terram humosam in hortis, Los Hornos pr. La Plata, Argentina.

5. *Peziza silvestris* (Boud.) Sacc. et Trav. — Syll. XX, p. 317 — 5359 *Aleuria silvestris* Boud., Icon. Mycol. II (1906) pl. 261; Hist. et Class. Disc. Europe (1907) p. 44. — Magna, sessilis, 4-8 cm. lata, e cupulato applanata, extus pallida, subtiliter tomentoso-furfuracea, intus fusco-fuliginea, margine sublobato lutescente; paraphysibus hyalinis, ad apicem clavulatis $6-8 \mu$. cr.; ascis clavato-cylindraceis, octosporis, $220-250 \times 14-15$, jodo cærulescentibus; sporidiis ellipsoideis, albis, levibus, sed intus minutissime granulosis, vacuolo centrali plus minusve conspicuo, $17-18 \times 9-10$.

Hab. ad terram sabulosam in silvis Fontainebleau Gallia.

6. *Peziza ampliata* Pers. — Syll. VIII, p. 92 — var. *costifera* Boud., 5360 Icon., Mycol. t. II, pl. 264 bis (1906), Hist. et Classif. Discomyc. Europe (1907) p. 44 (*Aleuria*). — A typo differt ascomate subtus costulis simplicibus v. bifurcatis prædito.

Hab. ad terram prope Montmorency. — var. *palustris* Boud., l. c. p. 44 (1907). — A typo differt forma minus cupulata, plus pulvinata, ascomatibus magis sessilibus crassioribus et regularibus, paraphysibus apice magis distincte clavulatis. — Ad lignum putrem Ecouen et Angers, Gallia.

7. *Peziza annamitica* (Pat.) Sacc. et Trott., *Aleuria annamitica* Pat. 5361 touill., Bull. Soc. Myc. de Fr. XXV (1909) p. 3, tab. II, fig. 3. — Magna, 6-8 cm. diam., carnosae, fragilis; ascomate sessili, cupuliformi dein expanso, plicato-undulato, margine inciso sinuato,

extus albo, glabro, hymenio castaneo; ascis longis, 18-20 μ . latis, operculatis, 8-sporis; paraphysibus numerosis, granulis castaneis repletis, linearibus, apice incrassatis, 8-10 μ .; sporidiis ovoideis, majusculis, 25 \approx 17, biguttulatis, verrucis validis, obtusis v. acutiusculis dense obsessis.

Hab. in ligno putri terra immixta, in silva Kam ly, Annam Asie (EBERHARDT). -- *Pezizæ Emileiæ* Cooke proxima.

8. *Peziza spiralis* (Hazsl.) Sacc. et Trav. — Syll. XX, pag. 317 — 5362

Pustularia spiralis Hazsl., Magyar Discom. p. 270, t. I, f. 32. — Ascomatibus sessilibus, concavo-scutellatis, centro tantum affixis, 5-6 cm. latis, carnosis, albidis. margine obtusulo, disco atro-purpureo; ascis tereti-clavatis, apice rotundatis, infra medium (abnormiter?) spiraliter contortis, octosporis; sporidiis elliptico-fusoideis, utrinque acutiusculis, hyalinis.

Hab. ad terram in silvis pr. Eperies Hungariæ.

9. *Peziza sundaica* (v. Höhn.) Sacc. et Trott., *Pustularia sundaica* 5363

v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 395. — Ascomatibus carnosis e globoso patellaribus usque ad 4 cm. latis et 3 cm. altis, tenuibus griseo-flavidis v. pallide griseo-alutaceis, extus glabris, basi in pedicellum brevem (3-5 mm.) crassum granuloso-pruinose angustatis; contextu parenchymatico; ascis cylindræis, octosporis, 200-260 \approx 14, apice operculatim aperientibus; paraphysibus filiformibus, apice parum claviformi incrassatis; sporidiis supra monostichis, hyalinis, levibus, ellipsoideis, 14-15 \approx 9-9.5. J. +

Hab. ad terram in silvis primævis, Tjibodas in ins. Java. —

Pust. variæ (Hedw.) affinis.

10. *Peziza rubro-fusca* (Rehm) Sacc. et Trott., *Plicaria rubro-fusca* 5364

Rehm, Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 577. — Ascomatibus cæspitose congregatis, sessilibus, in stipitem brevissimum elongatis, demum patellaribus, disco crasse subcrenulat-marginato, plano, orbiculari, demum irregulariter undulato, excipulo glabro, e cellulis parenchymaticis c. 20 μ . diam., externis fusciculis contexto, rubro-fuscis, 2-4 cm. diam., ceraceis; ascis cylindræis, apice truncatis, jodo cærulescentibus 300 \approx 10, octosporis; sporidiis ellipsoideis, utrinque rotundatis, glabris, 1-cellularibus cum guttis 2 magnis oleosis, hyalinis, 15-17 \approx 7-8, monostichis; paraphysibus, filiformibus, 2 μ . ad apicem clavatam flavo-fuscam 6 μ . cr.

Hab. ad terram, Isle Royale Mich. Amer. bor. (HARPER). —

Juxta *Pezizam sepiatram* et *sepiatrellam* ponenda species, magnitudine et colore ascomatum et sporidiis minoribus plane aliena.

11. *Peziza repandoides* (Rehm) Sacc. et Trott., *Plicaria repandoides* 5365

Rehm, Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 518. — Ascomatibus sessilibus, patellaribus, ad basim brevissime substipitatis, disco orbiculari plano, dein umbilicato-undulato, tenuissime mox incise marginato, hyalino-fuscidulo, exepulo glabro, contextu parenchymatico, amylaceo-albescente, 3-4 cm. diam., siccis disco albo-pruinosis, vario modo complicatis, ceraceis; ascis cylindraceutis, apice truncatis ibique jodo cærulescentibus 300 × 10, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, haud guttatis, levibus, 12-14 × 6-7, monostichis; paraphysibus filiformibus, septatis, 2 µ., versus apicem 3 µ. cr., ibique flavidulis et subcurvatis.

Hab. ad lignum putridum Populi, Port Byron Ill. Amer. bor. (HARPER). — Pertinet ad stirpem *Pezizæ repandæ* et *ampliatae*; ab utraque forma haud clavata paraphysium nec minus sporidiorum minutie divergens.

12. *Peziza scissa* Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII, 5366

4 (1905) p. 13. — Ascomatibus subcæspitosis, sessilibus, contortis, latere scissis, margine integro, involuto, extus pruinosis, alutaceis, disco obscuriore, 2-3 cm. latis; ascis longissimis 10 µ. circ. cr.; sporidiis monostichis, ellipsoideis, levibus, biguttulatis, hyalinis, circiter 12 × 5; paraphysibus filiformibus, flexuosis, circ. 1 µ. cr.

Hab. in fragmentis ligneis terraque in regione Kuopioënsi, Fennia (O. LÖNNBOHM). — Ad *Pez. cochleatam* nec non *P. alutaceam* proxime accedit.

13. *Peziza humicola* (Boud.) Sacc. et Trav. — Syll. XX, p. 314 — 5367

Aleuria humicola Boud., Icon. Myc. t. II, pl. 262 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 45. — Media, 2-3 cm. lata, sessilis, ochraceo-citrina, extus concolor, minute furpuracea, margine subcrenulata; hymenio cupulare, dein applanato; ascis maximis, cylindrico-clavatis, octosporis, operculatis, jodo cærulescentibus, 450-460 × 24-28; paraphysibus linearibus, albis, intus spumosis, ad apicem parum incrassatis, 6-8 µ. cr.; sporidiis hyalinis, majoribus, ellipsoideis, 25-28 × 12-14.

Hab. ad terram in viridario Montmorency, Gallia. — Colore et magnitudine sporidiorum distincta.

14. *Peziza lilacina* (Boud.) Sacc. et Trav. — Syll. XX, pag. 315 — 5368

Aleuria lilacina Boud., Icon. Mycol. t. II, pl. 277 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 45. — Media, 1,5-4,5 cm.

lata, cupularis, dein applanata, extus glabra, tantum ad marginem lutescentem minutissime furfuracea, pallide cinereo-purpurascens aut lilacina, hymenio saturatiore dein expallente; ascis cylindraceis, octosporis, 250-300 \times 12-14; paraphysibus tenuibus, ad apicem vix incrassatis, septatis, 4-5 μ . cr., hyalinis; sporidiis ellipsoideis, intus non guttulatis et granulis externis ad extremitatem positis denique secedentibus ornatis, 13-15 \times 8-9.

Hab. ad terram herbosam combustam, Gallia merid. (ROLLAND).

— *Aleur. violaceæ* affinis sed differt colore pallidiore, paraphysibus hyalinis, sporidiis minoribus etc.

15. *Peziza asterigma* (Vuill.) Sacc. et Trav. — Syll. XX, p. 309 — 5369

Aleuria asterigma Vuill. Assoc. franç. Avanc. Sc. (1886) pag. 1, t. X (extr.), Boudier, Ic. Mycol. t. 266. — Ascomatibus solitariis v. paucis cæspitosis, breviter obconico-stipitatis v. subsessilibus, nunc infundibuliformibus, nunc irregulariter expansis margineque incisis, ceraceis, ex albido brunneolis, basi albo-byssinis, extus minute verruculosi; disco concavo rarius convexo, 15-25 mm. lato, rarius usque ad 30 mm.; ascis octosporis, cylindraceis, deorsum tenuatis, apice truncatis, operculatis, jodoque tinctis, 300 \times 19; paraphysibus filiformi-clavulatis, septulatis, ascum vix superantibus; sporidiis oblique monostichis, ellipsoideis, 23 \times 13, pro more 1-guttulatis, hyalinis.

Hab. in fimo, sponte evoluta in laboratorio botanico, Nancy Gallie. — Socius adest status conidiophorus, qui omnino videtur *Edocephali* species a peraffini *Ed. fimetario* (Riess) Sacc. vix diversa conidiis brevioribus, nempe 6,5 \times 3, pariter ex hyalino ochraceis et vesicula 25 μ . diam. pariter spherica, muriculata.

16. *Peziza paludicola* (Boud.) Sacc. et Trav. — Syll. XX, p. 315 — 5370

Aleuria paludicola Boud., Icon. Mycol. t. II, pl. 269 (1906), Hist. et Classif. Discomyc. Europe (1907) pag. 46. — Minor, 1-2 cm. lata, breviter stipitata, carnosa, spissa, hymenio plano non cupulato, fulvo, extus pallescens minute furfuracea; ascis majoribus, octosporis, hyalinis, 330-400 \times 20-25, jodo leniter cærulescentibus; paraphysibus crassis, parce septatis, ad apicem incrassatis, 18-22 μ . cr., pallide ochraceis; sporidiis majoribus, ellipsoideis, hyalinis sed leniter ochraceo-tinctis, 23-26 \times 12-15.

Hab. ad folia putrida Caricis in paludosis prope Montmorency, Gallia. — *Pezizæ ampliatae* var. *palustri* affinis sed differt ascomate stipitato, paraphysibus, ascis, sporidiis majoribus etc.

17. *Peziza Labessiana* (Boud.) Sacc. et Trav. — Syll. XX, p. 315 — 5371

Aleuria Labessiana Boud., Icon. Mycol. t. II, pl. 282 bis (1906) Hist. et Classif. Discomyc. Europe (1907) pag. 46. — Media aut minor, 1-2 cm. lata; ascomate sessili, extus ad basim pallido et ad marginem umbrino et furfuraceo, hymenio saturatiore badio-fuligineo; ascis, elongatis, octosporis, vix fuscescentibus, 260-300 \times 17-18, jodo cærulescentibus; paraphysibus tenuibus, septatis, pallide fuliginosis, ad apices vix incrassatis, 2-7 μ . cr.; sporidiis achrois, ellipsoideo-ovatis, extus minutissime verruculosi, intus granulis minutis in acervulos extremitatibus conglomeratis denique evanescentibus, sed non guttulis oleosis repletis, 15-17 \times 10-11.

Hab. ad terram herbosam, Angers Galliae (M. LABESSE). — *P. olivaceæ* affinis a qua differt statura minori, colore magis fuligineo, sporidiis minoribus sed latioribus etc.

18. *Peziza contorta* (Rick) Sacc. et Trott., *Plicaria contorta* Rick, 5372 *Broteria* V (1906) p. 30. — Ascomatibus gregariis, mutua pressione deformibus, 1 cm. latis, margine obtuso, undulato, viridiflavus, extus furfure pallidiori tectis, sessilibus; ascis 250-350 \times 13-18, octosporis, jodi ope cærulescentibus; sporidiis ellipsoideis, demum guttulis, hyalinis v. subflavidulis, episorio levi, uniseriatis, unilocularibus; paraphysibus versus apicem sensim valde dilatatis, capite usque ad 10 μ . latis, dilute fusciculis.

Hab. ad terram, Rio Grande do Sul Brasiliæ. — *Pezizæ delectanti* Starb. affinis.

OTIDEA (Pers.) Fuck. — Syll. VIII p. 94, X p. 4, XI p. 394, XIV p. 560, XVI p. 507, XVII p. 688.

1. *Otidea felina* (Pers.) Bres., F. Trident. II, p. 103, t. 215, *Peziza* 5373 *felina* Pers., Myc. Europ. I, p. 223. — Ascomatibus auriformibus, usque ad basim perviis, griseo-cinereis, e flocculoso glabrescentibus, 3-4,5 cm. alt., 2-3 cm. latis, basi attenuato-subradicatis, disco levi, pallide alutaceo, carne pallida, miti, inodora; ascis cylindraceis pedicellatis, jodo non tinctis, 170-200 \times 9-12; paraphysibus ramosis, apice curvato v. recto, vix incrassato, 3-4 μ . cr.; sporidiis ellipsoideis, 2-guttulatis, 11-13 \times 6-8.

Hab. in silvis Coniferarum in agro Tridentino, subcæspitosa. — Hypothecii contextus sub ascis subparenchymaticus, medio hyphoso-intricatus, excipuli subparenchymaticus in hyphas fasciculatas productus.

DISCINA Fr. — Syll. VIII p. 99, X p. 4, XI p. 395, XIV p. 747, XVI p. 708, XVIII p. 21.

1. *Discina repanda* (Wahlb.) Fr. — Syll. VIII, p. 100 — var. *terrestris* Bres., Fung. Trid. tab. 190 (*Peziza varia* f. *terrestris*). — 5874

A typo differt habitatione terrestri, statura pro more majore, disco saturatius colorato, margine evidentius crenulato; cetera eadem.

Hab. ad terram juxta vias v. ad margines agrorum in agro Tridentino. — Sub *Peziza varia* Hedw. cl. Bresadola colligit, ut varietates, *Discinam repandam*, *Geopyxidem Catinum* et hanc formam terricolam.

2. *Discina disticha* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Ar. 5875

kiv f. Bot. Bd. V (1905) p. 2, fig. 2. — Ascomatibus cupulatis applanatis, basim versus oblique contractis vel breviter fere stipitatis, stipite plicato, margine acuto, paulum repando, crenulato, lateritiis, disco pallidior, contextu carnosogelatinoso, hyalino, intricato, c. 3 cm. diam.; ascis octosporis, cylindratis vel subclavatis, sursum obtusatis, $80-90 \times 25$; sporidiis hyalinis, oblongatis, curvulis vel inaequilateralibus, in superiore parte asci primo saepe transversim jacentibus vel conglobatis, denique omnibus saepissime distichis, guttulis, 25×11 ; paraphysibus numerosis, hyalinis, guttulis, filiformibus, $1,5 \mu$. crassis, sursum non incrassatis.

Hab. in ligno mucido in silva primæva, col. Ijuhy Rio Grande do Sul, Brasilia (MALME). — Quoad locum in systemate hæc species valde dubia; ob texturam facile inter Ombrophilas locanda, ab illis autem magnitudine, a Pezizis veris sporidiis distichis divergit.

3. *Discina ? lenta* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Ar. 5876

kiv f. Bot. Bd. V (1905) pag. 2, fig. 1. — Ascomatibus evolutis late expansis, disco convexo vel applanato, acute marginatis, subtus stipiteque breviter et crasse sulcatis, farinoso-puberulis, inaequaliter sed non lobatim determinatis, sordide albidis, hymenio flavovirescente; contextu dense intricato hyphis angustis, stipitem versus magis porrectis, in pariete excipuli membranaceo-porrectis, 1-3 cm. diam.; ascis octosporis, cylindratis vel cylindratis-subclavatis, sursum obtuse rotundatis, membrana perpaulum incrassata, $140-153 \times 15$; sporidiis hyalinis, imbricatim monostichis, oblongato-ellipsoideis, plerumque curvulis vel inaequilateralibus, guttulis duabus ornatis, $25-30 \times 11,5-12$; paraphysibus numerosis, hyalinis, conglutinatis, filiformibus, $1-2 \mu$. latis, sursum perpaulum clavulatis incrassatis, clavula $1,5-2,5 \mu$. crassa, ascos æquantibus.

Hab. ad terram? Rio Grande do Sul, col. Ijuhy (MALME). — Quoad genus dubia species, contextu distincta.

4. *Discina ferruginascens* (Boud.) Sacc. et Trott., *Disciotis ferrugi-* 5877
nascens Boud., Hist. et Class. Discomyc. Europe (1907) pag. 42, Icon. Mycol. t. II, pl. 274. — Pro genere minor, 1-2,5 cm., pallide fulva leniter ferruginascens, primo cupularis, dein applanata, sub-
tus pallidior glabra; ascis cylindraceis, octosporis, ad basim subat-
tenuatis, 250-280 \times 12; paraphysibus gracilibus supra leviter in-
crassatis 3-4 μ . latis; sporidiis hyalinis, ovato-fusoideis, ad apices
non granulosis, 14-17 \times 7-8, Jodi ope immutatis.

Hab. ad terram pr. Nizza (BARLA). — Teste Boud. l. c. *Discina*
venosa Cooke et Sacc. Syll. p. p. est *Peziza Barleana* Bres. —
Syll. XVI, p. 703.

5. *Discina maturescens* (Boud.) Sacc. — Syll. XI, p. 395 (imperfecte 5878
descripta), *Disciotis maturescens* Boud. Bull. Soc. Mycol. Fr. (1891)
p. 214, t. XV, f. 1. — Ascomatibus primum cupulatis dein appla-
natis, subimmarginatis, integris, 3,5-4 cm. latis, brunneo-badiis,
extus pallide cinereo-rufescentibus, crassiusculis, carne pallida, di-
sco sæpe undulato; ascis cylindraceis, operculatis, 400 \times 20-23, ad
basim paullo tenuatis, octosporis, paraphysibus simplicibus v. ad
basim divis, septatis, filiformi-clavulatis, 7-10 μ . cr., fuscis, intus
granulosis; sporidiis ellipsoideis, hyalinis aut vix ochraceis, levi-
bus, ad apices sæpius granulis plasmaticis extus coronatis, 22-25 \times
12-13.

Hab. ad terram argillosam pr. Nizza (BARLA). — Var. *fulve-*
scens Boud., Ic. Mycol II, t. 256 bis, Discom. d' Europe p. 42. —
A typo nonnisi colore fulvescente dignoscenda. — In Gallia.

6. *Discina australica* Cooke, Austral. Fungi (1892) p. 255, t. XXI, 5879
f. 176. — Ascomatibus cupuliformibus, majusculis, 5-10 cm. latis,
dein expansis, glabris, ochraceis, in stipitem brevem crassum radi-
culosum supra attenuatis; disco concolori; ascis sporidiisque adhuc
ignotis.

Hab. ad terram, Victoria Australiae.

DETONIA Sacc. — Syll. VIII p. 105, XIV p. 747.

1. *Detonia Rouastiana* (Boud.) Sacc. et Trav. — Syll. XIX, p. 563. — 5880
Plicaria Rouastiana Boud., Icon. Mycol. t. II, pl. 303 (1906), Hist.
et Classif. Discomyc. Europe (1907) pag. 50. — Media, 2,5-3 cm.
lata, sessilis, tota fulvo-purpurascens, subtus pallidior verruculosa,
hymenio e cupulari applanato dein convexo, undulato, margine

sublobato; ascis cylindrico-clavatis, ad basim subattenuatis, hyalinis v. pallide fuscescentibus, octosporis, $250-300 \times 15-16$; paraphysibus ad apicem crassioribus, septatis, fuscescentibus, sæpe gelatina tectis, $7-8 \mu$. cr.; sporidiis perfecte sphaericis, intus parce granulosis, hyalinis aut pallide fuscescentibus.

Hab. ad terram sabulosam in silvis Coniferarum, Lyon Galliae (ROUAST).

2. *Detonia albida* Rick, Broteria V (1906) pag. 29. — Ascomatibus 5381
intus extusque albidis, 2 mm. latis, extus tenuiter tomentosis; ascis 180×16 ; sporidiis globosis 15μ . diam., episporio glabro; paraphysibus filiformibus.

Hab. ad terram, Rio Grande do Sul Brasiliæ.

GALACTINIA Cooke — Syll. VIII p. 106, XI p. 395, XIV p. 748, XVI p. 708.

1. *Galactinia Cornui* Boud., Icon. Mycol. t. II, pl. 299 (1906), Hist. et 5382
Classif. Discom. Europe p. 49 (1907). — Media, 2-3 cm. lata, badio-purpurea, subtus dilutior et minute verruculosa, sessilis, applanata, margine subdenticulato; ascis octosporis, operculatis, cylindraceis, $300-350 \times 15-20$, jodo cærulescentibus; paraphysibus ad apicem vix clavatis, fusco-badiis, septatis, $8-9 \mu$. cr.; sporidiis ovatis aut ovato-ellipsoideis, sæpe acuminatis, extus verruculosis, intus guttula oleosa sæpe evanescente, $20-23 \times 7-9$, fulvescentibus.

Hab. ad terram in calidario, Parisiis Galliae (M. CORNU). —

Phæop. apiculatæ affinis sed differt statura et ceteris notis.

2. *Galactinia Luisieri* Torrend, Bull. Soc. portugaise Sc. Nat. III, 1 5383
(1909) p. 5 (extr.). — Minor v. media, primum cupularis 6-8 mm. lata, demum expansa, 1-3 cm., intus nigra, extus pallidior, imo ad basim albo-grisella, furfuracea v. granulosa, margine æquali, fracta lac albo-cæruleum exsudans; ascis elongato-cylindraceis, ad basim vix attenuatis, octosporis, $280-300 \times 13-17$; paraphysibus hyalinis, gracilibus, subramosis, apice incrassatis, ibique $4-5 \mu$. cr., jodo apice cærulescentibus; sporidiis ovoideis, hyalinis, levibus, maturitate minute verrucosis, 2-guttulatis, $16-18 \times 4-5$.

Hab. ad terram graminosam prope rivulum, Serra d' Ossa, Villa Viçosa Lusitaniæ. — *Gal. badio-fuscae* et *Gal. saniosce* affinis.

3. *Galactinia badio-fusca* Boud., Icon. Mycol. t. II, pl. 297 (1906) 5384
Hist. et Classif. Discomyc. Europe (1907) pag. 48. — Media aut minuta 0,5-1,5 cm. lata, sessilis, badio-fusca, extus pallidior, granulosa, margine minute granulato, ascomatibus primo concavis

dein applanatis, fractis lac albo-cæruleum sudantibus; ascis elongato-cylindraceis ad basim vix attenuatis, octosporis, pallide fuliginosis, $300-320 \times 12-17$; paraphysibus hyalinis, septatis, ad apices subincrassatis, 6-7 μ . cr., epithecio gelatinoso saepe tectis; sporidiis perfecte ovoideis, hyalinis, extus crebre verruculosus, intus guttula unica media rarius bi-aut tridivisa donatis, $13-15 \times 9-10$; carne fusca lactescente.

Hab. ad terram in silvis. Montmorency, Gallia. — *Gal. saniosæ* affinis sed differt statura majori et sporidiis latoribus magis minute verrucosis.

PYRONEMA Carus — Syll. VIII p. 107, XI p. 395, XVIII p. 22.

1. **Pyronema rugosum** Pat. in Doass. et Patouill. Champ. n. 43, Revue Mycol. III, n. 12 (1881) p. 11 et IV (1882) t. 25, f. 8. — 5885
Ascomatibus convexis, minutis, 1 mm. diam., confluentibus, extus eximie areolato-rugosis, late rubris, siccis rubro-aurantiacis, in mycelio albo membranaceo-connexo et subsecedente nidulantibus; hypothecio parco rubente; ascis tereti-clavatis, deorsum breviter tenuato-stipitatis, octosporis, filiformi-paraphysatis; sporidiis ovoideo-ellipsoideis utrinque obtuse rotundatis, oblique monostichis, 1-guttulatis, hyalinis.

Hab. in muris nondum plane exsiccatis, Poligny Gallia. — A *Pyronemate omphalode* dignoscitur, teste auctore, sporidiis crassioribus et, ut videtur, superficie ascomatis areolato-rugosa. Forte *P. haemastigmati* affinius, sed mycelium in hoc minus evolutum.

2. **Pyronema amaniense** P. Henn., Engl. Jahrb. XXXVIII (1905) p. 116. — 5886
Ascomatibus dense gregariis, cupulatis, ceraceo-carnosis, extus pallidis, margine aurantiis, disco flavido concavo, c. 1-1,5 mm. diam., hyphis flavide brunneolis v. hyalinis, ramosis, septatis, granulatis, usque ad 15 μ . cr. circumdatis; ascis cylindraceo-clavatis, vertice rotundato-obtusis, octosporis, $120-140 \times 9-11$, paraphysibus filiformibus, guttulatis, hyalinis 2,5 μ . cr., apice hamatis et usque ad 4 μ . cr.; sporidiis monostichis, ellipsoideis, obtusis, eguttulatis, hyalinis, $12-16 \times 5-7$.

Hab. in areis carbonariis. Amani Ost-Usambara Africae contr.

3. **Pyronema tapesioides** Rehm — Syll. XI, p. 396 — var. **saccharinum** Rehm, Ascom. exsicc. n. 1732, Ann. Myc. V (1907) p. 467. — 5887
Ascomatibus primum glaucis subglobosis rubro-flavidis demum late apertis, disco flavo-albido 0,3-2,5 mm. lat.; excipulo parenchymatico e cellulis rotundatis v. fusoideis, 40×30 , hyalinis; ascis

cylindraceis, rotundatis, c. $150 \approx 7-8$, octosporis; sporidiis elongatis, rotundatis, levibus, unilocularibus, $15-18 \approx 9$, monostichis; paraphysibus filiformibus 3 μ . cr., supra usque ad 6 μ ., hyalinis.

Hab. in superficie limi (sedimenti) in saccharificio, Schönowitz prope Zülz Silesiæ (Buchs).

BARLÆINA Sacc. — Syll. VIII p. 111, X p. 5, XI p. 396, XIV p. 748, XVI p. 710, XVIII p. 23.

1. *Barlæina livida* (Rehm) Sacc. et Trav. — Syll. XIX, p. 139 — 5388
Crouania livida Rehm in Hazsl. Magyar Discom. (1886) p. 262, t. VII, f. 26. — Ascomatibus sessilibus scutellatis, glabris, obtuse marginatis, lividis; ascis cylindraceis, apice rotundatis deorsum longe tenuato-stipitatis; paraphysibus filiformi-clavatis obvallatis, octosporis; sporidiis monostichis perfecte sphaericis, levibus, crassiuscule tunicatis, $14-15 \mu$. diam., hyalinis.

Hab. ad terram in Hungaria (Lojka).

2. *Barlæina subcærulea* (Kirschst.) Sacc. et Trott., *Barlæa subcærulea* 5389
Kirschst., Verh. Bot. Ver. Brandenb. XKVIII (1906) p. 46. — Ascomatibus solitarie insidentibus, applanato-depressis, orbicularibus, acutiuscule marginatis, pallide cyaneis, siccis flavescentibus, 3-5 mm. diam., ceraceis; ascis cylindraceis, supra rotundatis vel subtruncatis, operculatis, $140-170 \approx 10$, breviter pedicellatis, octosporis; sporidiis monostichis, hyalinis, globosis, crebre verruculoso-aculeatis, centro uniguttulatis, 8-9 μ . diam.; paraphysibus filiformibus, continuis, supra sæpe subcurvulis, hyalinis.

Hab. ad terram herbosam prope Gross-Behnitz Germaniæ.

3. *Barlæina dictydiola* (Boud.) Sacc. et Trav. — Syll. XIX, p. 139 5390
— *Lamprospora dictydiola* Boud., Icon. Mycol. t. II, pl. 403 (1906) Hist. et Classif. Discomyc. Europe (1907) p. 68. — Minuta, 3-5 mm. lata, aurantiaca, margine lato et dentato pallidiore; ascis octosporis, cylindricis, $230-300 \approx 13-15$; paraphysibus aurantiacis ad apicem vix incrassatis, ad basim ramosis et septatis, jodo tinctis, 6-7 μ . crassis; sporidiis perfecte rotundatis, albis, extus minute et tenuissime reticulatis, intus guttula oleosa crassa sæpius unica repletis, 15-16 μ . latis.

Hab. ad muros muscoso, Montmorency, Gallia. — Sporidiis minute reticulatis distincta.

4. *Barlæina Crec'hquercaultii* (Cr.) Sacc. — Syll. VIII, pag. 113 —
var. *macrantha* Boud., Icon. Mycol. t. II, pl. 405 (1906), Hist. et

Classif. Discom. Europe p. 69 (1907) [*Lamprospora*]. — A typo differt sporidiis spinulis validioribus tectis.

Hab. ad terram in Gallia.

5. *Barlæina Strasseri* Bres. in Strasser, III Nachtr. Pilz. Sonntagb. 5391 (Verhandl. zool. bot. Gesell. Wien (1905) p. 613). — Ascomatibus carnosus, dense gregariis, sessilibus, concavo-applanatis, glabris, vivide etiam in sicco cinnabarinis, 2-4 mm. latis; ascis cylindraceutis, stipitatis, 180-200 \times 10-11, jodo haud tinctis; paraphysibus filiformibus, 1 μ . latis, apice curvatis, haud incrassatis; sporidiis globosis v. subglobosis, levibus, 8-10 μ . diam. vel 10 \times 9.

Hab. in areis carbonariis jam vetustis ad muscos v. ad terram in silvis Montis Sancti, Sonntagberg Austriae inf. — A *B. Polytichii* Sch., *cinnabarina*, *carbonaria* diversa; cum *Barlæina Rickii* Rehm, forsitan conjungenda.

6. *Barlæina carbonicola* (Boud.) Saçç. et Trav. — Syll. XIX p. 138 5392 — *Lamprospora carbonicola* Boud., Icon. Mycol. t. II, pl. 401 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 68. — Minuta, aurantiaca, 1,5-3 mm. lata, margine late denticulata, subtus dilutior; ascis clavatis, octosporis, amplis, ad basim sensim attenuatis, 210-250 \times 15-19; paraphysibus septatis, aurantiacis, ad apicem paululum incrassatis, 7-8 μ . cr., simplicibus aut ad basim divisis; sporidiis albis, levibus, perfecte sphaeroideis, intus guttula oleosa crassa in maturis unica, in junioribus granulis plus minusve numerosis comitata, 13-15 μ . cr.

Hab. ad terram muscosam in areis carbonariis, Montmorency Gallia. — A speciebus affinis differt sporidiis sphaeroideis levibus.

7. *Barlæina læterubra* Rehm, Ascom. Amer. bor., Ann. Myc. v. III 5393 (1905) p. 516 (*Barlæa*). — Ascomatibus sessilibus, gregariis, primitus globoso-clausis, dein patellaribus, irregulariter orbicularibus, distincte marginatis, disco late rubro, extus glabris, pallidius rubescentibus, 1-4 mm. diam., carnosus; ascis cylindraceutis, apice rotundatis, 180-200 \times 12, octosporis, jodi ope nulla; sporidiis globosis, levibus, guttam 1 magnam oleosam includentibus, hyalinis, 10 μ . diam., monostichis; paraphysibus, filiformibus, septatis, ad apicem hamatis, 1,5 μ . cr., hyalinis.

Hab. ad terram, Madison Wisconsin Amer. bor. (HARPER). — A proxima *B. convexella* colore et sporidiis multo minoribus divergens, item a *B. globifera* colore et paraphysibus hamatis.

8. *Barlæina kerguelensis* P. Henn., Deutsche Südpolar-Exped. Bd. 5394 VIII (1906) Extr. p. 8, t. I, f. 11 a-c. — Ascomatibus primo sub-

globosis, dein discoideo-explanatis, carnosulis, coccineis, extus subpallidis, levibus, primo marginatis, 1-2 mm. diam., disco plano coccineo; ascis cylindraceo-clavatis apice obtuso-rotundatis, c. 280-340 μ . long., p. sp. 140-180 \times 18-22, octosporis; paraphysibus basi ramosis, filiformibus, intus aurantio-guttulatis, c. 3 μ . cr., apice 4-8 μ . incrassatis, rotundatis; sporidiis monostichis, globosis, hyalinis, verrucoso-echinatis, c. 17-20 μ ., verrucis obtusis vel acutis c. 4-5 \times 2.

Hab. ad terram muscosam, Kerguelen-Station (E. WERTH). — *Barl. asperellæ* Rehm affinis, a qua differt ascis longioribus, sporidiis verrucoso-echinatis, etc.

HUMARIA (Fr.) Fuck. em. Sacc. — Syll. VIII p. 118, X p. 4, XI p. 396, XIV p. 749, XVI p. 710, XVIII p. 166.

1. *Humaria lacteo-cinerea* Rehm, Ascom. Amer. bor., Ann. Myc. III 5395 (1905) p. 517. — Ascomatibus gregariis, sessilibus, patellaribus, disco irregulariter explanato, repande marginato, margine mox recurvo, irregulari, cinereo-albo, 0,5-2 cm. diam., excipulo glabro, albescente, in stipitem brevissimum subcylindraceum elongato, ceraceis; ascis cylindraceis, apice subtruncatis, 120-150 \times 10-12, octosporis, jodi ope immutatis; sporidiis ellipsoideis, utrinque obtusis, 1-cellularibus, gutta oleosa centrali magna præditis, hyalinis, episporio crasso verrucoso, 12-13 \times 7-8, monostichis; paraphysibus filiformibus, septatis, 3-4 μ ., versus apicem subclavatum, 5 μ . cr., hyalinis.

Hab. in aquæductu pineo in calidario, Madison Wisconsin Amer. bor. (HARPER). — Fungus colore albo sporidiisque verrucosis insignis videtur, sed specimina visa senilia.

2. *Humaria lilacina* (Boud.) Sacc. et Trav. — Syll. XIX, p. 880 — 5396 *Aleuria lilacina* Boud., Ic. Mycol. II, t. 277, Discom. d'Europe, p. 45. — Media, cm. 1,5-4,5 lata, cupularis, dein applanata, extus glabra, tantum ad marginem lutescentem minutissime furfuracea, pallide cinereo-purpurascens aut lilacina, disco saturatiore dein expallente; ascis cylindricis, octosporis 250-300 \times 12-14; paraphysibus tenuibus, apice vix incrassatis, septatis, 4-5 μ . cr., hyalinis; sporidiis ellipsoideis intus non guttulatis et granulis externis utrinque positos denique secedentibus ornatis, 13-15 \times 8-9.

Hab. ad terram locis aridis in Gallia meridionali (ROLLAND). — Ab affini *H. violacea* probe distincta.

3. *Humaria livida* (Lamb.) Sacc et Trav. — Syll. XIX, p. 880 — 5397
Leucoloma livida Lamb. Fl. Mycol. Belg. Suppl. I, p. 318, f. 63 a.
 — Gregaria, conferta, carnosa, minuta, plano-scutellata, cinereo-livida, margine integro v. irregulariter lobato; sporidiis ellipsoideis, 24×12 , 1-guttulatis, hyalinis.

Hab. ad lapides, Mæstricht Hollandiæ.

4. *Humaria olivaceo-fusca* Rehm, Contr. Mycol. Hung. (Növ. Közl. 5398 (1905) p. 6). — Ascomatibus sessilibus, primitus fere subimmersis, globoso-clausis, dein urceolatis, demum margine crasso plus minusve irregulariter inciso, excipuli contextu parenchymatico, glabris, olivaceo-fuscis, carnosus, 1 cm. diam.; ascis subclavatis, apice rotundatis, 150×20 , octosporis, jodo immutatis; sporidiis fusoides, 1-cellularibus, guttam oleosam magnam includentibus, levibus, hyalinis, monostichis, $20-22 \times 10-12$; paraphysibus filiformibus, septatis, 2 μ ., versus apicem sensim 5 μ . cr. ibique flavidulis.

Hab. in loco eluto, Berencsfalu, prope Selmeczbánya Hungariæ (KMET). — Sporidiis fusiformibus a ceteris *Humariæ* speciebus olivaceo-fuscis terrincolis diversa.

5. *Humaria humosa* Fr. — Syll. VIII, pag. 120 var. *anthracobia* 5399
 Boud., Hist. et Classif. Discomyc. Europe (1907) p. 67. — A typo differt statura semper minori et habitatione.

Hab. in areis carbonariis, Montmorency et silva Carnelle Gallia.

6. *Humaria schemnitzensis* Rehm, Contr. Mycol. Hung. (Növ. Közl. 5400 (1905) p. 6). — Ascomatibus sessilibus, mox irregulariter explanatis, suborbicularibus, dein repandis, crasse marginatis, nodulose brevissime stipitatis, excipulo glabro, crasse parenchymatice contexto, fusco-aurantiacis, carnosus, 0,5-1,5 cm. diam.; ascis cylindraceutis, apice rotundatis, longissimis, 10 μ . cr., octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, 1-cellularibus, haud guttatis, levibus, $10-12 \times 6-8$, monostichis; paraphysibus filiformibus, 2,5 μ . ad apicem 3-4 μ . cr., septatis, hyalinis.

Hab. ad terram in silva abietina, Hodrusbánya prope Selmeczbánya (KMET). — Quoad colorem similis *H. nemorosæ*, quæ autem nuper non explorata (cfr. Rehm, Discom. p. 955).

7. *Humaria wisconsiensis* Rehm, Ascom. Amer. bor., Ann. Myc. III 5401 (1905) p. 517. — Ascomatibus gregariis, sessilibus, globoso-clausis, mox patellaribus, orbicularibus, disco distincte marginato, plano, aurantiaco-flavo, haud cyathoides, extus glabris, pallidioribus, hyphis albidis, substrato affixis, ceraceis, 0,5-5 mm. diam.; ascis cla-

vatis, apice rotundatis, $40-45 \times 5-6$, octosporis, jodo immutatis; sporidiis ellipsoideis, 1-cellularibus, interdum subcurvatis, hyalinis, $6-7 \times 3$, distichis; paraphysibus filiformibus, septatis, $2-2,5 \mu$. cr., haud clavatis, flavidulis; excipulo crasso, parenchymatico, versus marginem pseudoprosenchymatico.

Hab. ad calamos putridos Caricis, Blue Mountains Wisconsin Amer. bor. (HARPER). — *Humaria flavotigens* B. et Br. (Cfr. Cooke Mycogr. f. 38) imprimis ascomatibus cyathiformibus mycelioque flavo divergit.

8. *Humaria Boudieri* (Quél.) Sacc. — Syll. VIII, p. 146 — var. *spa-* 5402
dicea Boud. Icon. Mycol. t. III, pl. 446, Histoir. et Classif. Discom. Europe p. 96 (1907) (*Discinella*). — A typo differt colore pallidiore minime purpurascenti.

Hab. ad terram in silvis, Beauchamp Galliae.

9. *Humaria furfurella* (Starb.) Sacc. et Trav. — Syll. XIX, p. 878 — 5408
Melachroia furfurella Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 3, fig. 3 a-c. — Ascomatibus sparsis vel nonnullis gregariis, superficialibus, primo cylindraceo-sphaerioideis vel subturbinatis, mox expansis, cupulatum patellatis, late centraliter ad matricem fixis, excipulo pallide furfuraceo, margine orbiculari, acuto, perpauillum crenulato, totis cremeis vel incarnatis, disco interdum obscuriore, pellucidis, contextu cartilagineo-gelatinoso, hypothecii intricato, excipuli porrecto, 2-8 mm. diam.; ascis octosporis, clavatis, sursum rotundatis, longissime pedicellatis, p. sp. $105-140 \times 12-14$; pedicello æquilongo vel longiore; sporidiis recte vel sæpe oblique vel fere transversim monostichis, ellipsoideis, interdum inæquilateralibus, guttulis duabus ornatis, lenissime colore roseo tinctis, $19-20 \times 10-11,5$; paraphysibus filiformibus, fere ad medium furcatis, sursum vix clavulato-incrassatis, $2-2,5 \mu$.

Hab. in ramulis mucidis, Tatarenda Gran Chaco, Bolivia. — Sicca ascomata varie contracta, extus ochraceo-albida, furfuracea, rugoso-plicatula, hymenio obscuriore, sæpe fulvo-rubescente; hyphæ breves, flexuosæ, sæpe globuloso- vel ovato-inflatæ e pariete exeuntes furfurem excipuli formant.

10. *Humaria nitida* (Boud.) Sacc. et Trav. — Syll. XIX, p. 881 — 5404
Anthracobia nitida Boud., Icon. Mycol. t. II, pl. 388 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 65. — Minuta $1,5-3$ mm. lata, rubro-aurantiaca, subtus pallidior; ascomatibus marginatis, extus pilis brevissimis, granulatim fasciculatis, septatis, ad apicem

brunneis, 60-80 \times 15, hymenio nitide aurantiaco-rubro; ascis cylindraceis, octosporis, 220 \times 15; paraphysibus simplicibus, ad apicem clava 8-10 μ . cr. terminatis, protoplasmate aurantiaco, jodo virescente repletis; sporidiis elliptico-oblongis, levibus, 2-guttulatis, 18-19 \times 8-9.

Hab. ad terram in areis carbonariis, Montmorency Gallia. — *Pyronem.* (Anthr.) *melalomatii* affinis sed differt statura minori, colore magis rubro, paraphysibus magis clavulatis, sporidiis brevioribus sed latioribus.

11. *Humaria flavens* Feltg., Vorst. Pilzfl. I Luxembg. Nachtr. IV (1905) 5405 p. 25. — Ascomatibus gregariis, liberis, patellaribus, 2-3 mm. latis; disco concavo v. subdepresso, udo pallide flavo, siccò aurantiaco, flocculoso marginato; extus concolori subfurfuraceo; ascis cylindraceis, supra rotundatis vel depressis, J-, basi longe angustatis, octosporis, 140-175 \times 10-14, p. spor. 60-75 μ . long., paraphysibus filiformibus apice subclavatis vel subcapitellatis, 3-6 μ . diam., flavidis, guttulatò-farctis obsitis; sporidiis monostichis, obtuse ellipsoideis, rectis, extus verrucoso-aculeolatis, unilocularibus, grosse biguttulatis, hyalinis, 8-10 \times 5-6.

Hab. ad terram argillaceam sub radice vetusta, Knaphoscheid Luxemburgia. — *H. flavo-rubenti* Rehm affinis.

12. *Humaria minutula* Pat., Bull. Soc. Myc. Fr. XXIII (1907) p. 84. 5406 — Sparsa v. gregaria, sessilis, minuta, 2 mm. circ. lata, extus supraque carnea, hymenio saturatiore, primo cupularis dein explanata subconvexa, extus levigata, margine obtuso integro, carne pallidiore; ascis operculatis, cylindraceis, 250 \times 15, octosporis, J-; sporidiis ovoideis, monostichis, hyalinis, levibus, majusculis, 15-21 \times 11-14, intus obscure biguttulatis; paraphysibus numerosis, septatis, vix incrassatis (4 μ .), fere hyalinis, non granulosis.

Hab. ad terram in fragmentis ligneis putrescentibus, Africa occidentali.

13. *Humaria xanthomeia* (Pers.) Quéf. — Syll. VIII, p. 128 — var. 5407 *americana* Rehm, in Ann. Mycol. III (1905) p. 230 (*Melachroia*). — Ascomatibus ad basim plus minusve contractis, inde peltiformibus.

Hab. in foliis dejectis infossis Pinorum, Tacoma Park, Washington Amer. bor. (SHEAR).

14. *Humaria globoso-pulvinata* Crossl., Naturalist (1908) pag. 216. — 5408 Ascomatibus gregariis v. sparsis, subrubro-carneis, firmulis, globosis, tum globoso-pulvinatis, puncto centrali affixis, carnosus, 1-1,25

mm. lat., 0,5-0,75 mm. cr., extus glabris, carne molli, hyphis excipuli intertextis, ramosis, septatis, 3-5 μ . cr., cellulis corticalibus subglobosis, 7-8 μ . diam.; ascis late cylindraceo-clavatis, sæpe curvatis, 140-150 \times 16-18, apice truncato-rotundato, deorsum tenuatis, octosporis; sporidiis oblongo-ellipsoideis, eguttulatis, continuis, hyalinis, levibus, 12 \approx 8; paraphysibus filiformibus, profusis, interdum ramosis, 3 μ . cr., plasmate granuloso, subrubro.

Hab. in sedimento dolii tinctorii inusitati, Hebden Bridge prope Halifax Britanniae. — Nonnullis notis ad *Ascophanum* nutat sed asci non operculati, nec emergentes etc.

SOLANELLA J. Vanha in Monathefte für Landwirtsch. (1910) p. 4 (extr.) (Etym. *Solanum*, cui noxia). — Ascoma epigæum, ex mycelio subterraneo filiformi, septato nascens, initio globulosum, clausum, dein apertum et dilatatum, excipulo subnullo, h. e. ex setulis fusioideis sursum cuspidatis, septatis tantum formato; hypothecio tenui. Asci cylindranei, paraphysati, octospori. Sporidia ellipsoidea, continua, hyalina. — Probabiliter *Humaricæ* v. *Psilopezicæ* nimis affine genus.

1. *Solanella rosea* J. Vanha, l. c. pag. 4-6, tab. I et II. — Chara- 5409 cteres generis. Ascomata, rosea, molliuscula, 0,5-1,2 mm. diam.; setulæ fusideo-ampulliformia, longe acute cuspidata, 3 4-septata, ascos paullo superantia; asci breve stipitati, apice rotundati, 160 \approx 11-12; sporidia ellipsoidea utrinque rotundata, 16-18 \times 10, farcta, subhyalina.

Hab. in agris, ubi *Solanum tuberosum* colitur et cui, teste auctore, morbum dictum *Kräusel- oder Rollkrankheit* affert, in Moravia.

ASCODESMIS v. Tiegh. — Syll. VIII p. 824, XVIII p. 29.

1. *Ascodesmis echinulata* Bainier, Bull. Soc. Myc. France XXIII 5410 (1907) p. 139, tab. XX (absque diagn.). — Ab *Ascod. nigricante* v. Tiegh. differt sporidiis ovoideis, 11 \approx 8 \approx 4, exosporio semper echinulato numquam reticulato.

Hab. in fimo in Gallia.

2. *Ascodesmis reticulata* Bainier, Bull. Soc. Mycol. Fr. XXIII (1907) 5411 p. 137, tab. XIX (absque diagnos.). — Ab *Ascodesmi nigricante* v. Tiegh. differt sporidiis majoribus, 15 \approx 11, exosporio reticulatim prominente obscuriore.

Hab. in fimo canino et bovino in Gallia.

SARCOSCYPHA (Fr.) Sacc. — Syll. VIII p. 153, XI p. 398, XIV p. 753, XIV p. 715, XVIII p. 30.

1. *Sarcoscypha concatenata* Rick, Broteria V (1906) p. 32. — Asco- 5412
matibus breviter stipitatis, 8 mm. latis, extus albis, sericeis, obiter
venosis, intus avellaneo-roseis, carne sicca; ascis longissimis, 10-
12 μ . latis; sporidiis 18-30 μ . long., 10 μ . latis, in ascis plerumque
ellipsoideis, extra ascum cylindraceis, biguttulatis, levibus, mucō
hyalino obvallatis, in asco inter se concatenatis, apicibus trunca-
tis; paraphysibus filiformibus, hyalinis.

Hab. in ramo Pini, Rio Grande do Sul Brasilæ.

2. *Sarcoscypha dawsoniensis* Peck, Bull. Torr. Bot. Club, XXXIII 5413
(1906) p. 220. — Ascomatibus cupulatis, 1-2 cm. latis, confertis
v. cæspitosis, sessilibus v. radicatis, basi sæpe inæqualibus v. sul-
catis, irregularibus, extus pruinosis v. tomentosulis, pallidis basi
albidis; disco rubro v. aurantiaco, sæpe plicato-rugoso; ascis cy-
lindraceis, 200-280 μ . long.; sporidiis monostichis, ellipsoideis, le-
vibus, 20 \times 10; paraphysibus angustis, filiformibus, apice subin-
crassatis.

Hab. ad terram infra plantulam musci *Leptobryii* pirifor-
mis, West Dawson Yukon Terr., Amer. bor. (E. B. STERLING).

3. *Sarcoscypha javensis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII 5414
Abt. I (1909) p. 395. — Ascomatibus molli-carnosis, plerumque
paucis cæspitosis, 3-4 mm. latis, scutellatis, in pedicellum 0,5-1
mm. longum angustatis, disco pallide rubro-carmineo, extus levibus
v. longitudinaliter rugulosis, e pallide rubido-albidis; hypothecio
300-350 μ . crasso, fibroso-plectenchymatico, excipulo transverse
marginato, 180 μ . crasso; ascis cylindraceis, octosporis, 230 \times 10;
paraphysibus filiformibus e basi semel v. bis ramosis, 1,5 μ . cr.;
sporidiis recte monostichis, cylindraceo-ellipsoideis, plerumque u-
trinque obtusulis, eguttulatis, 16-18 \times 8. J-.

Hab. in ligno putri in silvis primævis Tjibodas in ins. Java. —
Sarc. pusioni B. et C. affinis.

MACROPODIA Fuck. — Syll. VIII p. 158, XVIII p. 31.

1. *Macropodia Dubaleni* (Boud.) Sacc. et Trott., *Cyathipodia Dubaleni* 5415
Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39. — Pro
genere major, 5-10 cm. alta, receptaculo non lobato nec plicato,
cupulæformi dein repando et subconvexo; hymenio ochraceo-pal-
lido aut ochraceo-cinerascente, subtus albo aut albedo, levi; stipite
cylindrico, fistuloso, elongato, gracili, deorsum incrassato et com-

presso, sæpe ad basim lacunoso, colore saturatiore et minutissime albido-puberulo; paraphysibus elongatis, septatis, ad apices crassioribus et nebulosis, 7-10 μ . crassis; ascis octosporis, cylindraceutis, 300-330 \times 18-20; sporidiis ellipsoideis, intus guttula media crassa minoribus adjunctis repletis.

Hab. ad terram argillaceam in silvis, Isle-Adam et Saint-Sever Landes, Gallia.

2. *Macropodia gracilis* Hazsl. Magyar. Discom. p. 276, t. II, f. 34 5416 (1886). — Longe stipitata, glabra; cupula subhemisphærica, concava, subcartilaginea, grisea, stipite cylindrico, 3 cm. longo, 2 mm. cr., gracili; ascis et sporidiis ut in *Macr. macropode*.

Hab. ad terram inter muscos in Hungaria.

PLECTANIA Fuck. — Syll. VIII p. 163, XVI p. 716, XVIII p. 32.

1. *Plectania gelatinosa* Pat., Bull. Soc. Myc. Fr. XXIII (1907) p. 70. 5417

— Ascomatibus hemisphæricis, regularibus, 15 mm. circ. diam., margine integro crasso recto præditis, extus leniter floccosis nigro-violaceis; disco concavo, levi, olivaceo; stipite cylindrico 1 cm. long., 5 mm. cr., basi pilis sparsis brunneis elongatis, septatis, 5 μ . cr. prædito; trama gelatinosa, hyalina, inflata, ex pilis incolorebus, ramosis, 3-4 μ . cr. constituta; ascis apice truncatis basi elongatis, attenuatis, gracilibus, flexuosis, 300 \times 16, octosporis; J-; paraphysibus copiosis, bacillaribus, ramosis, septatis, apice coloratis et 3-4 μ . cr.; sporidiis monostichis, ovoideis, levibus, 10-12 \times 8.

Hab. ad lignum emortuum in vallis Djirin Indo-China.

LACHNEA (Fr.) Gill. — Syll. VIII p. 166, X p. 5, XIV p. 754, XVI p. 716, XVIII p. 76.

1. *Lachnea folliculata* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5418 Abt. I (1909) p. 396. — Ascomatibus patellariformiter expansis, extus rubro-brunneis, disco sordide rubro-miniato, 0,5-3 cm. latis, carnosus, parenchymaticus; setulis rubro-brunneis extus brevioribus, obtusis, ad marginem pluries seriatis, 20-25-septatis, usque ad 1,3 mm. long., acutis, basi usque ad 40-48 μ . cr., tunica usque ad 9 μ . cr. præditis, basi sæpe appendice radiciformi auctis; ascis cylindraceutis, basim versus sensim stipitiformini-angustatis, octosporis, 250-280 \times 16; paraphysibus numerosis extus mucosis, 2-3 μ . cr., supra globosis, hyalinis et usque ad 9 μ . cr.; sporidiis monostichis, hyalinis, ellipsoideis, irregulariter obtuse verruculosus (verrucis 2 μ . latis), 24-25 \times 13-16, utrinque appendicutatis, processibus utrinque

acutis lateraliter adpressis et apicibus conoideo-folliculatis; sporidiis cum folliculis 50 μ . long. J-.

Hab. ad tabulas udas Tjibodas in ins. Java.

2. *Lachnea Boudieri* Sacc. et Trott., *Sepultaria Boudieri* Torrend 5419
Bull. Soc. portugaise Sc. Nat. III, 1 (1909) p. 6 (extr.). — Minor v. media, 7-15 mm. lata, 1-2 cm. alta, primum hypogæa, globosa, diu clausa, deinde ore epigæo et constricto dehiscens, demumque sæpius in lacinias plures fissa, saltem in major. speciminibus; pilis longissimis 6-7 μ . cr., septatis, interdum ramosis, stramineis vel pallide fusciculis ad basim vestita; disco urceolato albicante, apice granuloso v. furfuraceo, ad basim piloso; ascis breve stipitatis, cylindraceis, 210-220 \times 15-17; sporidiis ellipsoideis, 1-guttulatis, 23-25 \times 14-15; paraphysibus simplicibus linearibus ad apicem breviter incrassatis.

Hab. ad terram argillaceam in quercetis, Villa Viçosa Lusitanæ. — Affinis *L. arenosæ*.

3. *Lachnea rufo-brunnea* P. Henn., in Voeltzkow Reise Ostafrika III 5420 (1908) p. 32, tab. III, f. 28. — Ascomatibus gregariis, cupulato-explanatis, pallide brunneis, ad marginem pilosis, c. 5-8 mm. diam., disco rufo-brunneo, levi, pilis simplicibus, rigidis, atro-castaneis, septatis, acutis vel obtusiusculis, 300-500 \times 20-40; ascis cylindraceis, obtuso-rotundatis, octosporis, 180-220 μ . long., p. sporif. 100-150 \times 10-14; paraphysibus filiformibus c. 2 μ . cr., septatis, ad apicem clavato-incrassatis, hyalinis, 5-7 μ . cr.; sporidiis monostichis, ellipsoideis, hyalinis, aculeato-verrucosis, 13-18 \times 8-12.

Hab. gregaria ad terram Fénérive Madagascar. — *L. Cha-teri* (Smith) affinis sed differt colore rubro-brunneo, setulis etc.

4. *Lachnea Chelchowskiana* Rouppert, Bull. Ac. Sc. Cracovie (1908) 5421 p. 650. — Ascomatibus sessilibus, dispersis v. gregariis, 5-6 mm. latis, interdum per paria inter æe conjunctis et gemellis similibus, superficie hymenii brunneo-lutea, pilis brunneo-luteis, septatis, 240 μ . long., 4-6 μ . latis circumdata; ascis cylindraceis obtusis, octosporis, 130-160 \times 12-14, jodo non cærulescentibus, paraphysibus filiformibus, hyalinis, 2-3 μ . cr.; sporidiis ellipsoideis, hyalinis, 16-18 \times 8-12.

Hab. in terra argillacea ad Raciazek prope Ciechocinek Poloniae. — *Lachn. cinerellæ* Rehm proxima, differt ascomatibus majoribus, ascis minoribus, pilis longioribus sed minus crassis, colore hymenii atque excipuli.

5. *Lachnea Cocoes* (Pat.) Sacc. et Trott., *Ciliaria Cocoes* Pat., Bull. 5422

Soc. Mycol. de France XXII (1906) p. 52. — Sessilis, carnosa, primitus hemisphærica demum applanata, 2-3 mm. diam., intus albida v. livida, extus brunneola, pilis brunneo-flavidis, septatis usque ad 0,5 mm. longis obsessa; ascis cylindraceis, longe attenuato-stipitatis, 8-sporis, 250×15 ; sporidiis monostichis, ovoideis, grosse obtuseque verrucosis, $10-20 \times 10$; paraphysibus linearibus, septatis, apice clavato-inflatis, hyalinis.

Hab. ad truncos putridos *Coccos nucifera*, Taravao Polynesia. — *Lachnea livida* (Sch.) affinis, differt sporidiis grosse verrucosis, pilis longioribus acutis etc.

6. *Lachnea Didymodontis* P. Henn., Deutsche Südpolar-Exped. Bd. 5428 VIII (1906) Extr. p. 7, taf. I, fig. 8 a, e. — Ascomatibus caespitosis, primo subgloboso-clausis, dein subhemisphærico-cupulatis, 2-3 mm. diam., brunneolis, extus margineque pilosis, pilis flexuosis, septulatis, apice obtusis v. acutiusculis, hyalinis, usque ad $250 \times 4-6$; disco concavo, levi, concolori v. brunneo-fusco; ascis clavatis, apice rotundatis, octosporis, $120-180 \times 15-20$; paraphysibus densis conglutinatis, filiformibus, $3-3,5 \mu$. cr., apice subclavatis, $4-5 \mu$. incrassatis, brunneolis; sporidiis oblique monostichis v. subdistichis, ellipsoideis v. fusoides, grosse 1-guttulatis, $15-18 \times 10-12$, episporio hyalino, primo sublevi, dein verrucoso-reticulato, angulato.

Hab. ad rupes inter species *Didymodontis*, Kerguelen-Station (E. WERTH).

7. *Lachnea Torrentis* Rehm, Ascom. exsicc. n. 1724, Ann. Myc. V 5424 (1907) p. 212. — Ascomatibus sparsis, sessilibus, primum globoso-clausis, dein late apertis, disco flavescentibus, 1-2 (raro -5) mm. latis, extus pilis curvulis, acutis, 1-6-septatis, brunneolis, $120-200 \times 15$ tectis; ascis cylindraceis, supra rotundatis, 150×14 , octosporis, jodi ope nulla; sporidiis elongatis, utrinque fortiter rotundatis, unilocularibus, non guttulatis, vix asperulis, hyalinis, $15-18 \times 7-8$, monostichis; paraphysibus filiformibus, supra rubro-purpurascens, usque ad 10μ . cr.

Hab. in sabulosis Sperrbach-Tobel prope Spielmannsau in alpihus Algovie (W. KRIEGER). — A *Lachnea ochroleuca* Bres. ascomatibus magis pilosis, a *L. carneo-sanguinea* Fuck. ascomatibus minoribus, sporidiis minoribus non guttulatis diversa.

8. *Lachnea scutellata* (L.) Gill. — Syll. VIII, p. 173 — var. *apopies-* 5425 *matis* Rehm, Ann. Mycol. VI (1908) pag. 117; Ascom. exsicc. fasc. 41, n. 1755. — A typo differt sporidiis plerumque levibus,

vix guttatis, 12-18 \times 10-12, demum dilutissime flavidulis; paraphysibus usque ad 10 μ . lat., haud guttatis, hyalinis.

Hab. in seminibus fructuum putrescentium in umbrosis prope Seitenstetten Sonntagberg Austriæ inf. (P. STRASSER). — *Apopisma* græce est fæx et vinacea.

9. *Lachnea chrysotricha* Rehm, Ann. Mycol. V (1907) pag. 520. — 5426

Ascomatibus gregariis, primitus globoso-clausis, mox urceolatis, dein explanatis, sessilibus, demum irregulariter complicatis, disco cinereo-flavescente, excipulo dense fusco-tomentoso, ad marginem pilis simplicibus, rectis, acutis, septatis, glabris, dilute aureo-fusculis, cellulis ad basim 18 μ . latis, dense aggregatis, 1 mm. longis coronatis, ceterum pilis fuscis 350 \times 12 obscurioribus obtectis; ascis cylindraceutis, apice rotundatis, 150 \times 15, octosporis; sporidiis obtuso-ellipsoideis, guttis 2 magnis oleosis repletis, scabriusculis, 1-cellularibus, hyalinis, 18-20 \times 9-10, monostichis; paraphysibus filiformibus, septatis, 2 μ ., versus apicem usque 7 μ . crassis, hyalinis.

Hab. ad ligna putrida, Sailor's Encompment, Mich. Amer. bor. (S. A. HARPER). — *Lach. Woolhopeiæ* et *L. lividæ* nonnullis notis proxima.

10. *Lachnea theleboloides* (Alb. et Schw.) Gill. — Syll. VIII, p. 179 5427

— var. *saccharata* Rehm, Ascom. exsicc. n. 1733, Ann. Myc. V (1907) p. 468. — Ascomatibus plerumque sparsis, primum globoso-clausis dein apertis flavescentibus, 0,5-3 mm., siccis convolutis; excipulo parenchymatico brunneo, margine pilis rectis, acutis, brunneis, septatis. 180 \times 15 tecto; ascis cylindraceutis 180 \times 15, J —, octosporis; sporidiis elongatis, rotundatis, non guttulatis, levibus, hyalinis, 15 \times 8, monostichis; paraphysibus filiformibus, septatis, 2,5-3 μ . cr., supra rotundato-clavatis usque ad 10 μ . cr., hyalinis.

Hab. in superficie limi (sedimenti) in saccharificio Schönowitz prope Zülz Silesia (BUCHS).

11. *Lachnea subcrinita* Rehm, Ann. Mycol. VII (1909) p. 535. — 5428

Ascomatibus sessilibus, gregariis, primitus globoso-clausis, dein patellaribus, disco orbiculari, pallide flavidulo, 2-4 mm. diam., extus ad marginem pilis simplicibus, rectis, obtusis, fusciculis, septatis, glabris, 200-250 \times 8-10, versus basim excipuli pilis conglutinatis, c. 100 μ . long., ad basim usque 15 μ . cr., subacutis et asperatis obsessis, excipulo ceraceo, e cellulis parenchymaticis, subhyalinis, magnis contexto; ascis cylindraceutis apice rotundatis, 150-180 \times 15-18, octosporis, jodo immutatis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, episporio demum dilutissime longi-

tudinaliter plicato, brunneo, 18-20 \times 12, monostichis; paraphysibus filiformibus, septatis, 3 μ . ad apicem usque ad 9 μ . cr., hyalinis.

Hab. ad lignum mucidum, Frankfort Michigan Amer. bor. (E. T. et S. A. HARPER).

12. *Lachnea calvescens* (Boud.) Sacc. et Trott., *Cheilymenia calvescens* Boud., Icon. Mycol. t. II, pl. 374 (1906), Hist. et Classif. Discom. Europe p. 63. — Minuta, 2-5 mm. lata, aurantio-rubra, pulvinata, rotundata, rarius sublobata, subtus pallidior, parce et breviter pilosa; ascis cylindraceis, octosporis, 220 \times 18; paraphysibus ad apicem clavatis, aurantio-rubris, simplicibus aut ad basim divisis, jodo virescentibus, clavula 10-13 μ . cr.; sporidiis ellipsoideis, extus minutissime verrucosis, 19-20 \times 9-10; pilis brevibus, simplicibus, raris, pallide fuscis, extremitate obtusa, ad basim simplicibus aut 2-3 divisis, 140-150 \times 10-12, 2-3-septatis.

Hab. ad terram viarum Montmorency, Gallia.

13. *Lachnea auræa* (Boud.) Sacc. et Trav. — Syll. XIX, p. 1010 — 5430 *Cheilymenia aurea* Boud., Icon. Mycol. t. II, pl. 385 (1906), Hist. et Classif. Discomyc. Europe p. 63 (1907). — Minuta, 2-4 mm. lata, luteo-aurantiaca, subtus pallidior, vix marginata, pilis brunneis septatis, 270-680 \times 10-15, acutis, præcipue ad marginem vestita; ascis cylindrico-clavatis, octosporis, 220-240 \times 17-20; paraphysibus simplicibus aut parce divisis, luteo-aurantiacis, septatis, ad apicem incrassatis; sporidiis ellipsoideis, hyalinis, 19-22 \times 12-13, sæpe muco hyalino involutis.

Hab. ad fimum vaccinum, Angers Gallie (GAILLARD). — A *Lachn. stercorea* distincta.

14. *Lachnea Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. 5431 VIII (1906) Extr. p. 7, tab. I, fig. 10 a, d. — Ascomatibus primo subhemisphæricis clausis, dein cupulato-explanatis, extus ferrugineo-tomentosis, margine sæpe undulatis, pilosis, pilis subulatis, apice acutis v. obtusiusculis, brunneis, septatis, 100-200 \times 15-18, disco subplano, coccineo, levi; ascis cylindraceo-clavatis, vertice rotundatis, octosporis, 200-250 \times 15-20; paraphysibus filiformibus, 3 μ . cr., septatis, apice clavatis, flavo-granulatis; sporidiis monostichis, ellipsoideis, 1-2-guttulatis, 16-22 \times 14-17, episporio hyalino, granuloso-subaculeato.

Hab. ad terram muscosam, Kerguelen Station (E. WERTH). —

A *Lach. kerguelensi* Berk. sporidiis omnino diversa.

15. *Lachnea brunneola* Rehm — Syll. XI, p. 399 — var. *brasiliensis* 5432 Bresadola, in Rick, Fungi austro-amer. II, Ann. Mycol. vol. III

(1905) p. 15. — A typo differre videtur hymenio pallido et forma ascomatum primitus turbinata.

Hab. ad terram in Brasilia.

16. *Lachnea austriaca* Sacc. et Trott., *Lachnea* (Melastiza) *Boudieri* 5433 v. Höhn. in Rehm Ascom. exsicc. fasc. 46, n. 1876, Ann. Mycol. (1910) p. 298, non *Lachnea* (Sepult.) *Boudieri* Torr. — Sanguineo-rubra, *Lachneæ rubicundæ* affinis, a qua differt pilis acutis, simplicibus et sporidiis majoribus, 15-17 \approx 10-12.

Hab. in argillosis prope Kalksburg in Wiener Wald Austriae.

17. *Lachnea antarctica* P. Henn., Deutsche Südpolar-Exped. Bd. 5434 VIII (1906) Extr. p. 8, tab. I, fig. 9 a-e. — Ascomatibus aggregatis, primo subglobosis, dein cupulatis, extus pallidulis, pilosis, margine pilis erectis, brunneis, apice obtusis v. subacutis, hyalinis, parce septatis, usque ad 200 \approx 20 vestitis, disco aurantio, concavo v. subplano, levi, 1,5-2,5 mm. diam.; ascis cylindraceutis, apice rotundatis, octosporis, 200-250 \approx 13-18; paraphysibus filiformibus, hyalinis septatis, 3-3,5 μ . cr., apice clavatis, granuloso-guttulatis; sporidiis ellipsoideis, oblique monostichis, 14-18 \approx 10-15, episporio levi, hyalino subfusco.

Hab. ad terram in ins. Kerguelen (E. WERTH).

SPHÆROSPORA Sacc. — Syll. VIII p. 188, XVI p. 720, XVIII p. 38.

1. *Sphærospora confusa* (Cke.) Sacc. — Syll. VIII, pag. 190 — var. 5435 ochracea Rehm, Ascom. exs. n. 1731 (1907) Ann. Myc. V (1907) p. 467. — A typo differt ascomatibus pallidioribus (pallide ochraceis nec brunneo-castaneis), statura evidenter majore (usque ad 6 mm. lat.).

Hab. in area combusta prope Zülz in Pakosz Silesiae (BUCCHS).

NEOTTIELLA (Cooke) Sacc. — Syll. VIII p. 190, XI p. 400, XIV p. 760, XVI p. 720, XVIII p. 39.

1. *Neottiella sericeo-villosa* Rehm, in Kellerman Journ. of Mycol. 5436 XIV (1908) p. 6. — Ascomatibus gregariis, ligno putrido insidentibus, primitus globoso-clausis, demum urceolatis, expansis, campanuliformibus, regulariter marginatis, haud stipitatis, disco caeruleo-livido, extus sericeo-villosis usque ad marginem, fuscidule cinereis, pilis simplicibus, rectis v. subcurvulis, interdum conglutinatis, obtusis, glabris, septatis, 500 μ . long., usque ad apicem aequaliter 5-7 μ . lat., subhyalinis, fragilibus obtectis, 0,5-5 cm. diam., 0,5-2 cm. alt.; hymenio plane involuto!

Hab. ad terram?, Volcano Atitlán alt. 2700 m. Guatemala et in *Opuntia* Dept. Amatitlán Guatemala (KELLERMAN). -- Species pulcherrima, hymenio plane carens. secundum formam et excipulum hirsutum forsitan *Neottiellæ* sp. Similis videtur *Lachnæ Plumieræ* Fr. Americæ centr. Specimina in *Opuntia* lecta præbent ascos 40-46 \times 25-32, sporidia 20-22 \times 8, hyalina. « *Ægre fero, ait REHM, me in plurimis microscopicis præparatis intra excipula crasse tunicata modo ascos dispersos ovaes, sporidia plane ineoluta includentes invenisse* ».

2. *Neottiella Höhneliana* Rehm in v. Höhnel in Ann. Myc. III (1905) 5487 p. 554, c. ic. -- Ascomatibus carnosus, primum albis arescendo extus sordide albis, usque ad 1 cm. diam., disco pallide brunneo, conchato, margine subincurvato, integro, subacuto, tomentoso; præditis, basi angustatis, intus levibus, extus minute breviter tomentoso-velutinis, pilis hyalinis, tenuibus, obtusis, 4-7-ocularibus, subclavatis, 40-160 \times 20-26; ascis cylindraceis, octosporis, 270 \times 11; paraphysibus 3-4 μ . cr., supra subclavatis et usque ad 5-6 μ . cr.; sporidiis hyalinis, unilocularibus, biguttulatis, ellipsoideis, levibus, 14-15 \times 8-9. J-.

Hab. ad terram in silvis prope Pressbaum, Wiener Wald, Austria.

3. *Neottiella subhirsuta* (Schum.) Sacc., Ann. Mycol. X (1912) p. 317, 5483 *Pyronema subhirsutum* (Schum.) Fuck. -- Syll. VIII, p. 108 -- *Humaria subhirsuta* (Schum.) Karst., Rehm. Disc. p. 943.

Hab. in lætamine ex foliis vinaceisque putridis formato in Horto botanico parmensi (Doct. C. BIANCHI). -- Ascomata subiculis omnino carentia, raro usque ad 10-11 mm. lata, sæpius vero minora, extus pilis filiformibus flaccidis hyalinis septatis usque ad 350 \times 10 conspersa. Ob hanc notam et defectum subiculi vera *Neottiella*, non *Pyronema*, nec *Humaria*. *Neottiella fraudans* (Karst.) est verisimillime hujus mera varietas.

4. *Neottiella Trabutiana* Patouill., Bull. trim. Soc. Myc. de France, 5489 vol. XXI (1905) pag. 119. -- Sparsa, sessilis, primum globulosa dein aperta, 0,5 cm. diam.; disco plano-concavo, rubro-aurantiaco; ascis cylindraceis, rotundatis et apice operculatis, 180-250 \times 21-25, 8-sporis; paraphysibus cylindraceis, rectis, apice claviformi incrassatis, septatis, intus granulis aurantiacis faretis; sporidiis monostichis levibus, hyalinis, ovoideis 18-22 \times 12-15, uniguttulatis; trama cellulosa incolori; superficie externa alba, pilis hyalinis parce septatis, acutis, 180-250 \times 21-25 prædita.

Hab. ad terram humidam muscosam prope Alger in Algeria Africæ bor. (TRABUT). — *N. Hetieri* Boud. proxima. Fibrillis hyalinis 3-5 μ . cr. crystallis incrustatis basi prædita.

SCLEROTINIA Fuck. — Syll. VIII p. 195, X p. 6, XI p. 401, XIV p. 761, XVI p. 721, XVIII p. 40.

1. *Sclerotinia Tiliæ* Reade, Ann. Mycol. VI (1908) p. 114. — Asco- 5440
matibus plerumque solitariis, cyathoides, longe stipitatis, 0,5-1 cm. altis, ceraceis; ascis cylindraceo-clavatis, octosporis, apice rotundato-truncatis, 140-170 \times 8-10, J-; sporidiis oblique monostichis, obtuse ellipsoideis, continuis, hyalinis, 9-11 \times 4-5; paraphysibus sparsis, filiformibus, hyalinis.

Hab. ex sclerotiiis in fructibus *Tiliæ* americanæ, Mt. Pleasant Iowa (S. J. SEAVER).

2. *Sclerotinia Corni* Reade, Ann. Mycol. VI (1908) p. 113. — Status 5441
ascophorus adhuc ignotus; status conidicus: cfr. *Monilia Corni* Reade.

Hab. in foliis *Corni* circinata in silvis Ithaca, New York Amer. bor.

3. *Sclerotinia Amelanchieris* Reade, Ann. Mycol. VI (1908) p. 114. 5442
— Status ascophorus adhuc ignotus; status conidicus: cfr. *Monilia Amelanchieris* Reade.

Hab. in fructibus *Amelanchieris canadensis*, Junus et Malloryville New York, *Amel. Botryapii*, Junus New York, Amer. bor.

4. *Sclerotinia angustior* Reade, Ann. Mycol. VI (1908) p. 113. — 5443
Ascomatibus plerumque solitariis, 0,5-2 mm. altis, cyathoides, longe stipitatis, ceraceis, extus glabris; excipulo ad exteriorem partem pseudoparenchymatice ad interiorem prosenchymatice contexto; ascis cylindraceo-clavatis, octosporis, 150-160 \times 8-10, apice rotundato, J+; paraphysibus paucis, angustis, 2 μ . cr., apice usque ad 4 μ . incrassatis, septatis, hyalinis; sporidiis oblique monostichis, obtuse ellipsoideis, 10-11 \times 5-6, continuis, hyalinis; conidiis (*Monilia angustior* (Sacc.) Reade = *M. Peckiana* var. *angustior* Sacc., Syll. X, p. 517) subgloboso-citriformibus 10-20 μ . cr. plerumque 12-15 μ ., continuis, hyalinis, catenulatis, disjunctioribus præditis, in maculis effusis, albido-cinereis pulvereis.

Hab. in fructibus sclerotisatis vere et in ramulis vivis æstivis *Pruni virginianæ* L., Ithaca New York Amer. bor. — *Scl. Seaveri* affinis differt matrice et chlamydosporis latioribus.

5. *Sclerotinia laxa* Aderh. et Ruhl., Arb. k. Gesundheits. Bd. IV 5444 (1905) p. 427. — Affinis *Sclerot. fructigenæ*; distinguitur cæspitulis conidiorum griseis, parvis; ascis $124-149 \times 8,5-11,8$; sporidiis ellipsoideis, obtusis (nec acutis), $11,5-13,5 \times 5,2-6,9$, sæpe guttulis oleosis præditis.

Hab. in fructibus mumificatis Pruni Armeniacæ in Germania. — Status conidiophorus est *Monilia laxa* (Ehrenb.) Sacc. — Syll. IV, p. 35.

6. *Sclerotinia Padi* Woron. in Mem. Acad. St. Petersb. XXXVI, 1888, 5445 p. 40 et 1895, tab. I-IV, Rehm, Disc. pag. 808. — Ascomatibus ex quoque sclerotio singulis v. raro binis, stipitatis, glabris, pallide brunneis; cupula 4-5 mm. lata, plano-concava; stipite filiformi, pro more longo, 0,5-2,5 cm. longo, 0,5-0,7 mm. cr.; ascis cylindraceutis prælongis, 168×10 , apice rotundatis brevissime noduloso-stipitatis, octosporis; paraphysibus filiformi-clavulatis, septatis obvallatis; sporidiis in tertia asci parte super. sitis, oblique monostichis, oblongo-ellipsoideis, biguttatis, hyalinis, $12-13 \times 6-7,5$.

Hab. in sclerotiis ad fructus mumificatos Pruni Padi in Rossia, Hungaria. — Status conidiophorus oritur in foliis et est *Monilia Linhartiana*. — Cfr. Woron. l. c.

7. *Sclerotinia Aucupariæ* Woron. in Mém. Acad. imp. Sc. St. Petersb. 8 sér., II 1 (1895) p. 15, t. 5 et in Zeitschr. f. Pflanzenkr. V (1895) pag. 134, t. 4. — Ascomatibus dilute brunneis, glabris, stipitatis; cupula 5-7 mm. lata, leviter concava, stipite 5-7 mm. longo, 0,5-0,7 mm. cr., filiformi, sæpe tortuoso, basi arrhizo; ascis cylindraceutis apice rotundatis, brevissime noduloso-stipitatis; sporidiis in asci tertia super. parte sitis, oblique monostichis, $11 \times 5,5$, hyalinis, biguttulatis, oblongo-ellipsoideis, utrinque rotundatis; paraphysibus filiformi-clavulatis; septatis.

Hab. in fructibus mumificatis Sorbi aucupariæ in Fennia (Woronin) et in Erzgebirge (Ludwig). — Ex quoque fructu oriuntur 1-4 ascomata. In foliis generatur st. conidiophorus, idest *Monilia Linhartrance* species affinis. Cfr. Woron. l. c. cum icon.

8. *Sclerotinia Cratægi* Magnus in Ber. Deutsch. Bot. Gesell. (1905) 5447 p. 197, t. V — Cfr. Syll. XVIII, p. 503. — Ascomatibus longe stipitatis, brunneis; stipite tortuoso, irregulariter cylindraceuto, 2-3 cm. longo, 1,5 mm. cr., sæpe noduloso, cupula mox explanato-convexa, margine involuta, passim incisa 3-8 mm. lata; ascis cylindraceutis, $170 \times 10-11$, p. sporif. 65 μ . longa, octosporis; sporidiis ellipsoideis, utrinque acutiusculis, $10-10,5 \times 5-5,2$, hyalinis, farctis.

Hab. in fructibus immaturis mumificatis et sclerotisatis *Craetegi Oxyacanthæ* in Thuringia (DIEDICKE), Silesiæ (EIDAM), Borussia (LAUBERT). — Status conidiophorus foliicola: *Monilia Craetegi* Died. — Syll. l. c. — In fructibus oritur quoque alia forma conidiophora. Cfr. Magn. l. c. t. V, f. 8.

9. **Sclerotinia Mespili** Woron. in Berichte Deutsch. bot. Gesell. IX 5448 (1891) p. 103 et Rehm Disc. p. 809 (st. conid.), Schellenberg in Centralbl. Bakt. II Abt. XVII (1907) p. 188, t. I-II (st. ascoph.). — Ascomatibus gregariis, breviter stipitatis, glabris; cupulis concavis 2,5 mm. latis; stipite cylindraceo, sæpe curvulo, 5 mm. long., 1 mm. cr.; ascis cylindraceis, apice rotundatis, deorsum sensim tenuato-stipitatis, octosporis, paraphysibus filiformi-clavulatis, septatis obvallatis, 160-180 × 10-12; sporidiis in medietate asci sup. sitis, oblique monostichis ellipsoideis, hyalinis, levibus, 12-14 × 8-9.

Hab. in fructibus mumificatis germinantibus *Mespili germanicæ*, Lugano, M. Bré, M. Generoso, Poschiamo Grigionis et in insula Mainau lacus Constantiæ, Helvetia. — Status conidiophorus est *Ocularia necans* Pass. quæ occurrit in foliis *Mespili* quoque in Italia et Franconia.

10. **Sclerotinia Cydoniæ** Schell. in Centralbl. Bakt. II Abt., XVII 5449 (1907) p. 189, *Stromatinia Linhartiana* Prill. Mal. pl. agric. II, p. 439, cum figg., excl. syn. — Ascomatibus solitariis v. 3-5-aggregatis, e brunneo cinereo-violaceis, stipitatis; cupulis plano-concavis, tenuiter marginatis, 0,5-1 cm. lat.; stipite breviusculo, cylindraceo, 1-1,5 cm. longo, in cupulam sensim dilatato; ascis cylindricis apice truncatis, 168 μ . longis, paraphysibus bacillari-clavulatis pseudoseptatis obvallatis, octosporis; sporidiis in asci medietate sup. oblique monostichis, ellipsoideis, hyalinis, 12 × 7-7,5.

Hab. in fructibus mumificatis *Cydoniæ vulgaris* in Gallia, Helvetia, Italia. — Status conidicus nascitur in foliis et refert *Moniliæ* speciem peraffinem *M. Linhartianæ*. Cfr. Prill. l. c.

11. **Sclerotinia Seaveri** Rehm, Ascom. Amer. bor., Ann. Myc. v. III 5450 (1905) p. 519; Ann. Myc. IV (1906) p. 66; Ascomyc. (1906) n. 1633; Reade in Ann. Mycol. VI (1908) p. 112. — Ascomatibus plerumque solitariis in putamine sessilibus, longe stipitatis, primitus cyathoides, dein patellaribus, disco orbiculari, distincte marginato, flavidulo, 5-10 mm. diametro, margine tenuissime crenulato, excipulo cum stipite glabro, fuscidulo, stipite cylindrico, curvatulo, 0,4-0,5 mm. lat., versus ascoma et basim subcrassiore, 1-2 cm. longo, siccis, extus cinereo-fuscidulis; excipulo prosenchymatico;

ascis cylindræis, apice rotundatis et incrassatis, $120-140 \times 6-8$, octosporis; poro jodo immutato; sporidiis obtuse ovoideis, 1-cellularibus, plerumque guttulis oleosis 2 instructis, hyalinis, $10-12 \times 4.5-5$, monostichis; paraphysibus sparsis, filiformibus, 2 μ ., ad apicem 4 μ . cr., hyalinis; conidiis subgloboso-citriformibus, continuis, hyalinis, $7-15 \mu$., plerumque $8-10 \mu$., catenulatis, disjunctioribus præditis, in maculis effusis, albido-cinereis, pulvereis, epiphyllis (*Monilia Seaveri* Reade).

Hab ad putamina Pruni serotinæ in terra putrescentia locis humidis silvarum, Iowa City, Iowa Amer. bor. (SEAVER). — Verisimiliter ex cotyledonibus scleroticis oritur. — *Sclerotinia Prunispinosæ* (Lib.) Speg. et Roum. in foliis exsicc. est plane diversa. 5451

12. *Sclerotinia Cerasi* Woron. Mém. Ac. St. Pétersb. XXXVI (1888) p. 39; Rehm, Discom. in Rabenh. Krypt., Fl. III (1896) p. 809. — Status sclerotialis et conidicus tantum sed imperfecte noti.

Hab. in fructibus mumificatis Pruni Cerasi in Finlandia.

13. *Sclerotinia Polycodontis* Reade, Ann. Mycol. VI (1908) p. 110. 5452 — Ascomatibus 1-4, cyathiformibus, longe stipitatis, $1-3.5$ cm. altis, ceraceis, extus fuscidulis quasi glaucis; ascis cylindræo-clavatis apice rotundato-truncatis, $200-240 \times 10-14$, J +; sporidiis 8, obtuse ellipsoideis, $15-20 \times 10-12$, continuis, hyalinis, biguttulatis monostichis; excipulo prosenchymatice contexto; chlamydosporis catenulatis disjunctioribus præditis, subgloboso-citriformibus, $15-16 \times 11-13$, hyalinis, continuis, in maculis effusis, albido-cinereis, pulvereis (*Monilia Polycodontis* Reade n. f.) paraphysibus paucis, angustis, simplicibus, 2 μ . crassis, apice incrassatulis, septatis, hyalinis.

Hab. in fructibus sclerotisatis ramulisque vivis Polycodontis staminei, in silvis humidis Ithaca New York Amer. bor. — A *Scl. Vaccinii-corymbosi* differt matrice et chlamydosporis minoribus.

14. *Sclerotinia Vaccinii-corymbosi* Reade, Ann. Mycol. VI (1908) 5453 p. 109. — Ascomatibus 1-7, ceraceis, longe stipitatis, $1-3.5$ cm. altis, cyathiformibus, tenuiter marginatis, extus fuscidulis quasi glaucis; ascis cylindræo-clavatis, apice rotundato-truncatis, $200-260 \times 10-12$, J +; paraphysibus angustis, parvis, simplicibus, 2-3 cr., apice incrassatulis, septatis, hyalinis; excipulo prosenchymatice; sporidiis 8 obtuse, ellipsoideis, continuis, hyalinis, $14-18 \times 9-10$, oblique monostichis; chlamydosporis catenulatis disjunctioribus præditis, subgloboso-citriformibus, hyalinis, $23-32 \times 19-25$, in

maculis effusis, albido-cinereis, pulvereis (*Monilia Vaccinii-corymbosi* Reade n. f.).

Hab. status ascophorus in fructibus sclerotisatis *Vaccinii corymbosi* vere, status chlamydosporicus in ramulis vivis inflorescentiisque æstivis, in sphagneto, Malloryville New York Amer. bor. — *Scl. Vaccinii* Wor. affinis, differt matrice, ascomatibus semper fructicolis, chlamydosporis minoribus.

15. *Sclerotinia Ocymi* Voglino, in Ann. R. Acc. Agric. Torino LII 5454 (1909) p. 284, in Atti R. Accad. Scienze Torino (1910) p. 265, f. 1. — Stipitata, minuta, carnosio-ceracea, castaneo-violacea; stipite tenui, cylindraceo, 2-2,5 mm. longo, ad basim atro, sursum castaneo-violaceo; cupula minuta cyathiformi, 1,5-2 mm. lata, castaneo-violacea; ascis cylindraceo-clavatis, 8-sporis, 55-70 \times 6-8; sporidiis ovoideis, hyalinis, 5-8 \times 4-5, raro 6; paraphysibus filiformibus, supra clavato-incrassatis, 70-75 \times 2-4.

Hab. in sclerotio, ad caules *Ocymi* Basilici quod morbo afficitur, Venaria Reale, Torino Italiæ bor.

16. *Sclerotinia Plöttneriana* Kirchst., in Rehm, Ascom. exsicc. n. 1603 5455 (1905) et Bot. Ver. Prov. Brandenb. XLVIII (1906) p. 43. — Ascomatibus ex seminibus matricis sclerotiatibus nigricantibus orientibus, 1-4 aggregatis, longe pedicellatis, pedicello 1-10 mm. longo et 0,5 mm. cr., pallide v. obscure brunneo; disco concolori primum globoso-clauso, dein applanato v. plus minus infundibuliformi, 2-3 mm. circ. lato, acute marginato; ascis cylindraceis, 160-180 \times 10-12, breviter et crasse pedicellatis, supra rotundatis, octosporis; sporidiis hyalinis, monostichis, unilocularibus, ovoideis, quandoque inæquilateris, 1-2-guttulatis, 15-18 \times 6-7; paraphysibus filiformibus, hyalinis, continuis, 3 μ . circ. cr.

Hab. in seminibus *Veronicæ hederifoliæ*, pr. Rathenow et Gross-Behnitzer Hasellake Germaniæ.

17. *Sclerotinia hirtella* Boud., Icon. Mycol. t. III, pl. 471 (1907); 5456 Hist. et Classif. Discomyc. Europe (1907) p. 107. — Minuta, gracilis, stipitata, 5-10 mm. alta, tota pallide ochraceo-cinerella, e sclerotio nigro, oblongo enata; cupulis infundibuliformibus, dein applanatis plus minusve longe stipitatis, extus undique, ut pedicello, pallide hirtis, hymenio concolore; pilis acutis, flexuosis, septatis, simplicibus aut bifidis, 90-11 \times 4; ascis cylindrico-clavatis, octosporis, 90-115 \times 7-8; paraphysibus linearibus ad apicem paululum incrassatis, albis; sporidiis ovoideo-oblongis, albis, hyalinis,

intus non granulosis, 7-9 \approx 4-5; sclerotio nigro, sulcato, oblongo sæpe curvato, 2-4 \approx 1,5, uni- aut pluricupulifero.

Hab. ad folia et ramulos putres Castaneæ in silva Montmorency Galliæ. — *Scl. Candolleanæ* affinis a qua differt sclerotio oblongo et pilis.

18. **Sclerotinia Bresadolæ** Rick in *Österr. bot. Zeitschr.* L (1900), 5457 p. 121. — Ascomatibus gregariis e sclerotio exterius nigro, interius albescente, rugoso, ovali, fere spherico, 2 mm. diam. provenientibus; primitus calyciformibus, demum disciformibus, margine tenero, hyalino-fuscis v. pallidis, stipite tenuissimo filiformi, 1-5 cm. longo, villosa, versus discum fere lanuginosa, 1-5 cm. latis, ceraceis, mollibus; ascis cylindraceutis 70-80 \approx 6-7, octosporis, poro rotundato jodo cærulescente; sporidiis ovoideis, uno apice paulo latioribus, hyalinis, 6-8 \approx 3-4; paraphysibus hyalinis, filiformibus, versus finem 3 μ . latis.

Hab. in gemmis *Quercus* putrescentibus ope *Dryoteratis* terminalis transformatis, Valkenburg, hollandice Limburg. — *Scl. Candolleanæ* (Lév.) affinis.

19. **Sclerotinia rathenowiana** Kirschst., in *Rehm Ascom. exsicc.* n. 1649 5458 (1905) et in *Verh. bot. Ver. Prov. Brandenb.* XLVIII (1906) p. 43. — Sclerotii in cortice immersis demum secedentibus, variabilibus, intus extusque nigris, superficie nitidis; ascomatibus pedicellatis, pedicello usque ad 3 cm. et ultra long., 0,5 mm. cr., primum albo pulveraceo dein nudo, rubido- v. griseo-brunneo; ascomatibus ceraceis pallide brunneo-griseis, siccis brunneoli, usque ad 6 mm. latis, primum infundibuliformibus, dein applanatis demumque revolutis, tenuibus; ascis cylindraceutis, 110-130 \approx 6-8, breviter pedicellatis, supra applanatis incrassatisque, octosporis, monostichis, ellipsoideis, quandoque inæquilateris, eguttulatis, unilocularibus, hyalinis, 7-11 \approx 4-5; paraphysibus filiformibus, hyalinis, septatis, supra usque ad 3 μ . incrassatis.

Hab. in ramulis salicinis putrescentibus prope Rathenow Germaniæ.

20. **Sclerotinia Alni** Maul, *Hedw.* XXXIII (1894) p. 215, t. XI-XII, 5459 *Rehm, Disc.* p. 1237. — Ascomatibus . . . ignotis; sclerotii in acheniis *Alni* orientibus et sat deformantibus, parum extantibus; conidiophoris ex sclerotio achenioque connato hinc inde dense cæspitose erumpentibus, ex albo virescentibus et *Spicaria* speciem (*S. Alni* Sacc.) sistentibus: conidiophoris primariis erectis, 4 μ . cr. filiformibus, parce septatis, subinde furcatis, sursum verticillato-

ramosis, verticillis plerumque binis inter se remotis (non penicillioideis) ramulis quaterno-quinis, sensim tenuatis, apice sporigeris; conidiis in catenulas senis-octonis dispositis, inæqualiter ellipsoideis, subangulosis, hyalinis, levibus, $1,7-2 \approx 1,5$.

Hab. in acheniis Alni glutinosæ, Reinhardsau Germaniæ (REES).

21. *Sclerotinia Coryli* Schell. in Ber. Deutsch. Bot. Gesell. (1906) 5460

p. 505, t. XXI. — Ascomatibus solitariis v. raro binis, longe stipitatis; cupulis infundibuliformibus concaviusculis dein subplanis 8-12 mm. latis, ambitu acutiusculis, ceraceis, læte brunneis, disco pallidiore; stipite filiformi usque ad 5 cm. longo, 2 mm. cr., glabro, filiformi, sæpe leviter tortuoso; ascis cylindraceutis, apice rotundatis deorsum sensim et longe tenuato-stipitatis, 140-160 \approx 10-12, paraphysibus filiformi-clavulatis, parce septatis, raro furcatis; sporidiis oblique monostichis, ovoideis, utrinque obtuse tenuatis, 15-16 \approx 8, hyalinis, intus granulosis, levibus.

Hab. in amentis masculis Coryli Avellanæ, ex eorum axi sclerotisato proveniens, pr. Poschiavo, Grigioni.

22. *Sclerotinia Betulæ* Woron., Mem. Acad. Sc. St. Petersb. XXXVI 5461

(1888) n. 7, Nawaschin, Sclerot. Betulæ, St. Petersb. 1893, p. 32, t. I-IV, Tubeuf. Pflanzenkr. pag. 274, cum icon. — Ascomatibus solitariis v. binis, disco 0,5-1,5 cm. longo, 1-1,5 mm. lato, initio infundibuliformi dein cupulato, 1-4 mm. lato, flavo v. subcarneo, recto v. obliquo, cylindraceuto, stipite basi rhizoidibus prædito ascis octosporis; sporidiis

Hab. in fructibus Betulæ in Germania.

23. *Sclerotinia Galanthi* Ludw. Lehrb. nied. Kryptog. p. 355 (1892) 5462

Rehm, Discom. p. 820 in Rabenh. Krypt. Fl. III (1896). — Status sclerotialis et conidicus tantum sed imperfecte noti.

Hab. in foliis floribusque Galanthi nivalis, Mecklenburg Germaniæ.

24. *Sclerotinia Paridis* (Boud.) Sacc. et Trav. — Syll. XX, p. 766 — 5463

Stromatinia Paridis Boud., Icon. Mycol. tab. III, pl. 479 (1905), Hist. et Classif. Discom. Europe pag. 108 (1907). — Major, stipitata, 1-2 cm. lata, fulvo-cinnamomea, pediculo flexuoso nigrescente longiore; cupulis primo infundibuliformibus, dein plus minusve applanatis, extus glabrescentibus, margine dentato; ascis minutis, cylindricis, inoperculatis, octosporis, 130-140 \approx 8-10; paraphysibus linearibus, ad apicem non incrassatis, 2-3 μ . cr., hyalinis;

sporidiis oblongo-ovoideis, inæquilateralibus, hyalinis sed intus guttulis oleosis pluribus ad extremitates repletis, 10-13 \times 4-6.

Hab. in radicibus denigratis Paridis quadrifoliæ in argillis silvaticis Ecouen Galliæ.

25. **Sclerotinia vesicaria** Giesenh., Ber. Bayr. Bot. Ges. XI (1907) 5464

p. 169. — Sclerotiiis irregulariter cylindraceis, rugosis, nigris, intus albidis, 5-8 mm. long., 2 mm. latis; ascomatibus singularibus vel pluribus pallide fulvis v. cinnamomeis, stipitatis, stipite 2-8 mm. long., 0,5-1 mm. cr., subtus tomentoso, disco cupulæformi 3-4 mm. diam., levi, disco cinnamomeo; paraphysibus numerosis filiformibus ad apicem vix incrassatis, 2 μ . cr.; ascis tenuibus cylindraceis, octosporis, 180-190 \times 9; sporidiis fusoideis, hyalinis, 12 \times 4.

Hab. inter utriculos dejectos emortuos Caricis vesicariæ, autumnò oriens, ad Stechsee prope Seeshaupt Bavariæ. — A ceteris *Sclerotiniæ* speciebus caricicolis satis diversa. Teste cl. Magnus *Cintractia Caricis* (Pers.) Magn. est species autonoma, non *Sclerotiniæ* st. conidiophorus ut opinatur cl. Giesenhagen.

26. **Sclerotinia Lindaviana** Kirschst. in Rehm, Ascom. exs. n. 1604 5465

(1905) et in Verh. Bot. Ver. Prov. Brandenb. XLVIII (1906) p. 42. — Sclerotiiis follicolis v. vaginicolis, angustis, depressis, irregularibus, nigris, sæpe concretescentibus, 1 cm. long., 0,5 cm. crassis; ascomatibus flavo-brunneolis, longitudine variabilibus, pedicello $\frac{1}{4}$ mm. cr., pruinoso; ascomatibus 2 mm. circ. diam., primum globoso-clausis dein applanatis, acute marginatis; disco plerumque pallidius colorato; excipulo prosenchymatico, brunneo; ascis cylindraceis, pedicellatis, 40-45 \times 4, octosporis; sporidiis oblique monostichis, hyalinis, ovoideis, plerumque irregularibus, eguttulatis, 4-5 \times 1,5-2; paraphysibus filiformibus, hyalinis, 1,5 μ . cr.

Hab. in foliis vaginisque putrescentibus Phragmitis communis, Gross-Behnitzer See et prope Rathenow Germaniæ.

27. **Sclerotinia Menieri** Boud., Icon. Mycol. tom. III, pl. 475 (1907), 5466

Hist. et Classif. Discomyc. Europe (1907) p. 108. — Minuta, pediculata, fulva, pediculo elongato glabro fuliginoso, supra pallidiore, e sclerotio, primo rotundato, tomentoso, albedo dein rufescente; ascis octosporis inoperculatis, foramine marginato jodo cærulescente, cylindraceis, 120-130 \times 8-10; paraphysibus tenuibus, non granulosis, ad apicem vix incrassatis, 4 μ . cr.; sporidiis ovatis, hyalinis, intus guttula minuta subcentrali rarius divisa præditis, 12-14 \times 6-7.

Hab. in paludosis in foliis primum vivis Phalaridis arundinaceæ prope Nantes, Gallia (MENIER).

28. *Sclerotinia Fuckeliana* De By. — Syll. VIII, pag. 196 — var. 5467.

Jeanperti Boud., Icon. Mycol. t. III, pl. 469 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 107. — Pro genere media, fuscobadia, e sclerotio cylindrico-difformi enata, paraphysibus cylindricis, ascis longioribus, a typo diversa.

Hab. in paludosis ad ripas Loing Galliae (M. JEANPÉRT).

29. *Sclerotinia wisconsinensis* Rehm, Ann. Mycol. VI (1908) p. 317. 5468

— Ascomatibus e sclerotio suborbiculari subtus convexulo, in superiore parte plus minusve plano vel umbilicato, extus nigro, intus albo, sicco corrugato, 3-6 mm. lato, 2,5-3 mm. crasso, 2-5, rarius singulis orientibus, primitus sphaeroideis, demum disciformibus, tenuiter marginatis, 1,5-3 mm. latis et altis, flavo-brunneis, glabris, senilibus fusco-brunneis, longe stipitatis; stipite cylindraceo, ca. 0,15-0,2 mm. lato, infra excipulum subcrassiore, 2-3 cm. longo, glabro, curvatulo, erecto, flavo-brunneolo; ascomatibus siccis cum stipite longitudinaliter corrugatis, disco albido-consperso; ascis clavatis, apice rotundatis, 150-180 × 12-15, octosporis, jodo cærulescentibus; sporidiis fusoides, utrinque plus minusve rotundatis, plerumque 1-2 guttis oleosis magnis præditis, hyalinis, 20-22 × 7, mono- rarius distichis; paraphysibus filiformibus, prominentibus, obtusis, septatis, hyalinis, 3-4 μ . crassis.

Hab. in silvis humidis ad terram fragmentis ligneis mixtam Madison Wisc. Amer. bor. (E. G. ARZBERGER). — A *Sclerotinia gracili* recedit sclerotiis sporidiisque minoribus.

30. *Sclerotinia sclerotiorum* (Lib.) Sacc. et Trott. — Ita vocanda est 5469

Peziza sclerotiorum Lib. Crypt. exs. IV, n. 326 (1837), *Sclerotinia Libertiana* Fuck. Symb. p. 331 (1869) — Syll. VIII, p. 196 (ubi alia synonyma), *Peziza Antzii* Münter in Bull. Acad. Sc. Belg. XI (1861) p. 222, f. 1-5.

31. *Sclerotinia nyssogena* (Ellis) Rehm, Ann. Mycol. IV (1906) p. 338. 5470

— Ita vocanda *Peziza nyssogena* Ellis seu *Ciboria nyssogena* (Ellis) Sacc. — Syll. VIII, p. 207.

Hab. in drupis vetustis Nyssæ multifloræ sub foliis coacervatis in Amer. bor.

32. *Sclerotinia Johnsonii* (E. et E.) Rehm, Ann. Mycol. IV (1906) 5471

p. 338; Reade Ann. Myc. VI (1908) p. 111. — Ita vocanda: *Ciboria Johnsonii* E. et E. (Proc. Acad. Phil. (1894) pag. 348 — Syll. XI, p. 402.

Hab. in fructibus dejectis Mali in Amer. bor. — Sec. Reade

- l. c. *Monilia Cratægi* Died. hujus esset st. conidiophorus, qui potius ad *Scl. Cratægi* P. Magn. spectat. Cfr. n. 8.
33. *Sclerotinia aconitincola* Rehm, (Esterr. bot. Ztschr. LVI (1906) 5472 p. 347. — (Nomen nudum).
- Hab.* in caulibus siccis *Aconiti* sp. Schrofenspass, Algovia.

CIBORIA Fuck. — Syll. VIII p. 201, XI p. 402, XIV p. 762, XVI p. 723, XVIII p. 45.

1. *Ciboria Fagi* Jaap, Fungi sel. exsicc. n. 353, Abh. Bot. Ver. Prov. 5473 Brandb. LII (1910) Extr. pag. 3. — Ascomatibus tenuibus, pure albis, solitariis, sed in squamis gemmaceis gregariis, initio infundibuliformi-dein disciformi-dilatatis, 0,4-0,6 mm. lat.; stipite gracillimo ad 8 mm. long.; ascis tereti-clavatis, rotundatis, subincrassatis, 48-52 \times 4,5-5,5, octosporis; sporidiis elongato-ellipsoideis v. clavatis, rotundatis, continuis, sæpe biguttulatis, 6 8,5 \times 2-2,5, mono- v. distichis, oblique dispositis; paraphysibus filiformibus, obtusis, hyalinis; asci poro jodi ope cærulescente.

Hab. in squamis putrescentibus gemmarum *Fagi* silvaticæ, Schleswig-Holstein Germaniæ.

2. *Ciboria argentinensis* Speg., Myc. Argent. IV, in An. Mus. Buenos Aires (1909) p. 444. — Mediocris, ochroleuca, subtenuis, coriacea, orbicularis, glaberrima, 5-20 mm. diam., margine integerrimo breviter pedicellata, pedicello vix obscuriore 3-5 mm. long., 1-1,5 mm. cr.; ascis jodo immutatis, linearibus, paraphysatis, truncatis, 200-220 \times 14, stipite 60-100 μ . long.; sporidiis octonis, elliptico-navicularibus, utrinque acutis, monostichis, 26 \times 11, sæpius conspicue 2-guttulatis.

Hab. ad ramos dejectos putres *Celtidium* in sepibus pr. Tucuman, Argentina.

3. *Ciboria fusco-cinerea* Rehm, Ann. Mycol. VII (1909) pag. 525, 5475 Ascom. exsicc. fasc. 45, n. 1853. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein cyathoideis, demum disco plus minusve explanato, orbiculari, tenuissime marginato, interdum medio umbilicato, 0,3-1 cm. diam., extus glabris cum stipite cylindrico, versus basim attenuato et fuscescente, 1-5 cm. longo, 0,5-0,7 mm. lato, hyalino-cinereis, demum alutaceo-fuscidulis, ceraceis, prosenchymatice contextis; ascis cylindræis, apice rotundatis et incrassatis, 150 \times 10-12, 8-sporis, jodo cærulescentibus; sporidiis oblongo-clavatis, apice superiore obtusis, sæpe subcurvatis, 1-cellularibus, gutta magna centrali oleosa instructis, hyalinis, 20-24 \times 5-6,

monostichis; paraphysibus filiformibus, septatis, hyalinis, 2,5 μ . apice obtusis, 3 μ . cr.

Hab. ad ligna Coniferarum humo oblecta, putrescentia in silvis prope Krohnes Lake et Perrys Swamp, Algoma Wisc. U. S. A. (B. A. Dodge).

4. *Ciboria acicola* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) 5476 p. 42. — Ascomatibus solitariis, pedicello tenui c. 0,5 mm. diam., 4-5 mm. long., obscure griseo-brunneo, infra nigricante, primum globoso-clausis mox discoideis, acute marginatis, 2 mm. diam.; disco ceraceo pallidiore extus obscuriore; ascis cylindraceo-clavatis, breviter pedicellatis, $90 \approx 8$, octosporis; sporidiis oblique monostichis, hyalinis, eguttulatis, unilocularibus, ellipsoideis, 8-10 \approx 3-4; paraphysibus hyalinis, filiformibus, supra claviformi incrassatis.

Hab. in foliis putrescentibus Abietis (Piceæ) excelsæ, Gross-Bechnittzer Park Germaniæ.

5. *Ciboria Hedwigiae* (Kirschst.) Sacc. et Trott., *Rutstræmia Hedwigiae* 5477 Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 41. — Ascomatibus solitariis v. confertis, pedicellatis; pedicello basi brunneo-nigro incrassato, supra pallide flavo-brunneo, nitidulo, levi, indistincte striato, 3-4 mm. long., circ. 0,5 mm. cr.; ascomate primum globoso clauso, dein aperto et acute marginato, demum applanato, rubro-brunneo, 1-1,5 circ. mm. diam.; excipulo brunneo, prosenchymatico, cellulis marginalibus filiformibus; ascis clavatis supra rotundatis, basi in pedicellum tenuatis, crasse tunicatis, octosporis, 140-170 \approx 16-18; sporidiis irregulariter distichis, hyalinis, granuloso-farctis, ellipsoideis vel oblongis, quandoque fere clavatis, primum 1- dein 2-septatis, 16-22 \approx 6-8; paraphysibus filiformibus, vix $\frac{1}{4}$ μ . cr., ramosis, hyalinis, supra brunneolis et usque ad 2 μ . cr.

Hab. parasitice inter foliola Rhacomitrii canescentis, in silvis prope Rathenow Germaniæ.

6. *Ciboria scoparia* Rehm in Jaap, Abh. bot. Ver. Prov. Brandenb. 5478 LII (1910) p. 113. — (Nomen nudum).

Hab. in leguminibus putrescentibus Sarrothamni scoparii prope Triglitz, Brandenburgia.

CHLOROSPENIUM Fr. — Syll. VIII p. 315, X p. 12, XI p. 407, XIV p. 773, XVIII p. 65.

1. *Chlorosplenium atro-viride* Bres., in Rick Fungi austro-amer. III, 5479

u. IV, n. 64, Ann. Myc. v. IV (1906) pag. 311. — (Nomen nudum).

Hab. in ligno in Brasilia, America austr.

HELOTIUM Fr. — Syll. VIII p. 210, X p. 6, XI p. 402, XIV p. 762, XVI p. 726, XVIII p. 47.

1. **Helotium Staudtii** P. Henn., Engl. Jahrb. XXXVIII (1905) p. 128. 5480
— Ascomatibus gregariis, ceraceo-carnosis, subsessilibus, primo sub-turbinato-cupulatis, dein subdiscoideis, marginatis, extus pallide pruinosis, margine integro v. crenulato, 0,4-0,8 mm. diam., disco concavo v. plano, flavido-brunneolo; ascis clavatis, apice obtuse rotundatis, octosporis, 30-45 \approx 3-3,5; paraphysibus filiformibus, septatis 1,5-2 μ . cr.; sporidiis oblique mono- v. subdistichis, clavatis v. subfusoides minute 2-guttulatis, hyalinis.

Hab. in superficie interna corticis Baphiæ, Lolodorf Kamerun Africae centr.

2. **Helotium Verbenæ** Cavara, Rev. Mycol. XI (1889) p. 178, t. 88 bis, 5481
f. 2. — Ascomatibus sparsis, stipitatis, firmis, majusculis, cupula primo infundibuliformi, demum expansa, pallide lutea, tomentosa, margine crenato-fimbriato, 1-2,5 mm. alta, disco plano levi, initio luteo dein ochraceo; stipite 1,5-3 mm. alto, crassiusculo, basi lutescenti, superne albicante; ascis cylindraceo-clavatis, 100-110 \approx 9-10, octosporis; paraphysibus filiformibus, continuis; sporidiis clavatis, leniter curvis, unicellularibus, monostichis, utrinque v. tantum basi cilium gerentibus, 20-22 \approx 4-5.

Hab. in caule emortuo Verbenæ officinalis, Pavia in Italia boreali.

3. **Helotium nubilipes** Boud., Icon. Mycol. t. III, pl. 491 (1907), Hist. 5482 et Classif. Discomyc. Europe (1907) p. 111. — Medium, albidum, 3-5 mm. altum, totidem latum, stipite elongato, minutissime puberulo, ad basim nigrescente, cupula marginata dein plana, extus glabra; ascis clavatis, octosporis, 140-160 \approx 12-13, foramine marginato; paraphysibus linearibus, ad apicem paululum incrassatis, granulosis, 5-6 μ . cr.; sporidiis majoribus, 22-34 \approx 5-6, clavæformibus, antice rotundatis, ad basim acutiusculis, albis, intus guttulis inæqualibus præsertim ad extremitates repletis.

Hab. in paludosis sub caulibus Cirsii oleracei, Montmorency, Gallia.

4. **Helotium herbarum** (Pers.) Fr. — Syll. VIII, p. 217 — (= *Phiala* 5483
leæ *Hymenula* (Fuckel) Sacc., Syll. VIII, p. 262) — var. *Tanacetii*

vulgaris C. Mass., Osserv. fitol. in Madonna Verona v. II (1908) p. 10. — Ascis 4,5 μ . cr.; sporidiis subfusoideo-cylindraceis, hyalinis, 10-12 \times 3.

Hab. in caulibus siccis *Tanacetum vulgare*, prope Bolca in agro Veronensi Ital. bor.

5. *Helotium consobrinum* Boud., Icon. Mycol. t. II, pl. 488 (1907), 5484
Hist. et Classif. Discomyc. Europe (1907) p. 114. — Majus, 2-3 mm. altum, 1-1,5 mm. latum, luteum, pediculo pallidiore ad basim incrassatam albo-villosulo, cupula applanata margine integro, extus glabra; paraphysibus linearibus, ad apicem vix incrassatis, granulosis, lutescentibus, 3-4 μ . crassis; ascis octosporis, clavatis, 70-90 \times 8-10; sporidiis fusoides, extremitatibus æqualiter acutiusculis, albis, intus ad apices minutissime granulosis, hyalinis dein (spuriæ?) uni-septatis, 15-26 \times 3-5.

Hab. in caulibus putrescentibus *Rumex*, Montmorency Gallia. — Ab *H. virgultorum* et *H. scutula* differt sporidiis et pediculo basi incrassato.

6. *Helotium marmolense* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 445. — Pusillum, coccineum, tenue, sparsum, orbiculare, plane sessile, concaviusculum, 2-3 mm. diam., subceraceum, extus ferrugineum; ascis e cylindraceo subclavulatis, apice obtusis 40-45 \times 5, octosporis, breviter pedicellatis, filiformi-paraphysatis, jodo immutatis; sporidiis ellipsoideis, minutis, utrinque acutiusculis et minutissime 1-guttulatis. 8-10 \times 3-4 hyalinis, lenissime inæquilateris.

Hab. ad ramos aridos putrescentes *Maclura aurantiaca* Marmol pr. Buenos Aires, Argentina.

7. *Helotium ascophanoides* (Boud.) Sacc. et Trav. — Syll. XIX p. 837 5486
Pachydisca ascophanoides Boudier, Icon. Myc. (1905) t. III, pl. 438, Hist. et Classif. Discom. Europe (1907) p. 93. — Minutissimum, sessile, 0,25-0,40 mm. latum, albido-ochraceum, subhyalinum, lenticulare, hymenio ascis granuloso; paraphysibus crassis, simplicibus, ad apicem subincrassatis, 4-4,5 μ . cr. intus minute granulosis, ad basim tantum septatis; ascis clavatis, octosporis, foramine marginato dehiscentibus, 80-90 \times 12-13; sporidiis oblongis, albis, intus grosse granulosis, ad apices subobtusis, sæpe curvulis, 13-15 \times 3,5-4.

Hab. in ligno populino putri, Montmorency, Gallia.

8. *Helotium Boudieri* Sacc. et Trost., *Calycella ochracea* Boud., Icon. Mycol. t. III, pl. 442 (1907), Hist. et Classif. Discomyc. Europe

(1907) pag. 95, non *Helot. ochraceum* (Grev.) Phill. — Minutum 1-1,5 mm. latum, ochraceo-fulvescens, vix stipitatum, cupulis subconcavis, levibus, varie undulatis, hymenio vix saturatiore; paraphysibus linearibus ad apicem subincrassatis, simplicibus aut divis, intus granulos, hyalinis, 2 μ . cr.; ascis clavatis, octosporis, 140-150 \approx 8-10; sporidiis hyalinis, fusoideis aut fusoideo-clavatis, intus vix granulos, 6-10 \approx 3-4.

Hab. in ligno corylino putri, Montmorency, Gallia.

9. *Helotium conscriptum* Karst. — Syll. VIII, p. 231 — var. oblongisporum Rehm, Sydow, Ann. Mycol. V (1907) p. 397; Mycoth. germ. n. 601. — Ascis cylindraceis, 90-120 \approx 7-9, octosporis; sporidiis oblongo-cylindraceis, rectis, utrinque rotundatis, continuis, utroque apice minime guttulatis, hyalinis, 12-15 \approx 4-5, monostichis. 5488

Hab. ad ramulos Salicis cinereæ emortuos, Buch pr. Bernau Germania (H. Sydow). — Sporidiis oblongatis nec ovoideis a typo dignoscitur.

10. *Helotium sparsum* Boud., Icon. Mycol. t. III, pl. 495 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 111. — Minutum, album 0,5-1,5 mm. latum, breviter stipitatum, pediculo concolore; ascis sat amplis, clavatis, octosporis, 120-125 \approx 14; paraphysibus linearibus, ad apicem granulos, albis, 4-5 μ . cr.; sporidiis oblongo-fusoideis, ad apices intus granulos, albis, 15-21 \approx 5-6, sæpe curvulis. 5489

Hab. ad folia quercina putrida, Montmorency, Gallia. — *H. amenti* affine, a quo differt statura majori, sporidiis diversis; ab *H. annulari* differt pediculo brevi sed distincto.

11. *Helotium Humuli* (Lasch) De Not. — Syll. VIII, p. 243 — var. minusculum Rehm, in Jaap, Fungi sel. exsicc. n. 363, Abh. Bot. Ver. Prov. Brandenb. LII (1910) Extr. p. 5. — A typo differt imprimis ascomatibus minoribus, tenuioribus, longius stipitatis et lætius rubello-coloratis. 5490

Hab. in caulibus Humuli Lupuli dejectis, prope Triglitz Germaniæ.

12. *Helotium niveum* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 44. — Ascomatibus solitariis, pedicello 1-2 mm. long., 1 mm. cr. pruinoso præditis, ceraceis, primum albo-niveis, siccis flavescentibus, late apertis et mox fere pileato-revolutis, acute marginatis, 1 mm. circ. diam.; ascis subclavatis, 50-70 \approx 4-5 basi in pedicellum elongatis, supra rotundatis, octosporis, oblique mono- 5491

v. distichis, hyalinis, unilocularibus, fusoides, $6-9 \approx 2-3$, biguttulatis; paraphysibus filiformibus 1,5 μ . cr.

Hab. in foliis pineis putrescentibus, in silvis prope Rathenow Germaniæ.

13. *Helotium musicola* Spegazz., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 446. — Pusillum, cinerescens, sessile, in macula albida situm, laxè gregarium, 0,5-0,8 mm. diam., extus olivaceum, planiusculum, margine integerrimo; ascis subclavatis, aparaphysatis, octosporis, breviter noduloso-pedicellatis, $60-65 \approx 10-14$, jodo fere immutatis; sporidiis ex elliptico subovatis, minutis, utrinque obtusulis, $10-12 \approx 5-6$, hyalinis, non v. grosse 2-guttatis.

Hab. ad folia et petiolos Musæ paradisiacæ in hortis pr. Orán, Argentina.

14. *Helotium citrinulum* Karst. — Syll. VIII, p. 288 (*Pezizella*) — 5493 var. *Seaveri* Rehm, Ascom. (1906) n. 1634, Ann. Myc. IV (1906) p. 67. — Ascomatibus dispersis sessilibus, primitus globoso-clavatis, mox patellariformiter apertis, disco orbiculari, tenuiter marginato, citrino-flavo, 0,5-4 mm. diam., extus glabris, albidis, versus basim subangustatis, excipulo prosenchymatice contexto, ceraceis, senilibus subplicatis crassiusque marginatis, siccis disco aurantio-flavo; ascis clavatis, apice rotundatis, $40-45 \approx 5-7$, octosporis; J +; sporidiis fusoides, rectis v. subcurvatis, utrinque acutatis, 1-cellularibus, hyalinis, $7-10 \approx 1,5$, distichis; paraphysibus filiformibus, hyalinis, 1 μ . cr.

Hab. ad calamos siccos Caricis? in locis apestribus, Iowa City Iowa U. St. Amer. (F. J. SEAVER).

15. *Helotium fulvidulum* (Boud.) Sacc. et Trav. — Syll. XIX, p. 838, 5494 *Pachydisca fulvidula* Boud., Icon. Mycol. t. III, pl. 439 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 94. — Minutum, 1,5-3 mm. latum, sessile aut brevissime crasseque stipitatum, cupulis convexis, adultis sublobatis, fulvis, extus ad basim nigricantibus; ascis elongato-claviformibus, octosporis, foramine marginato jodo vix cærulescente, $120-140 \approx 14-15$; paraphysibus septatis, ad apices non incrassatis, 3-4 μ . cr., intus granulis oleosis fulvis sæpe confluentibus repletis; sporidiis oblongo-fusoides, albis, rectis aut parum curvatis, intus guttulis oleosis albis 2-4 aut multis repletis, $20-28 \approx 5-6$.

Hab. ad terram inter Gramina et Carices, locis udis in silva Montmorency, Gallia.

16. *Helotium Bambusæ* v. Höhnelt, Ergebn. Bot. Exp. Südbres. 1901, 5495

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 33.
 — Ascomatibus sparsis, lenticularibus, disco parum prominenti, 1,5-3 mm. diam. et stipite 0,5 mm. longo, crassiusculo præditis, griseo-brunneolis, extus obscurioribus et radiatim striatis, plectenchymatico-fibrosis, brunneis; ascis longe pedicellatis, tunica tenui donatis, $120 \times 6-6,5$, octosporis; paraphysibus filiformibus, numerosis, supra brunneolis et leniter clavatis, usque ad 3 μ . cr.; sporidiis supra distichis, hyalinis, guttulatis, elongato-cylindraceis, utrinque obtusulis, $8-10 \times 2,5-3$; J +.

Hab. in culmo Bambusæ, Bertiago prope Santos, Sao Paulo in Brasilia.

17. *Helotium carneolum* Speg., Myc. Argent. IV in An. Mus. Buenos Aires (1909) p. 445. — Ascomatibus lenticularibus, subsessilibus, parvis, ceraceis, carneis, 0,5-1 mm. diam., inferne subturbinatis, supra convexulis, margine acuto integerrimis; ascis subclavulatis, apice obtuse rotundatis, crasse noduloseque pedicellatis, $50 \times 7-8$, octosporis, interdum tetrasporis, parce filiformi-paraphysatis; sporidiis navicularibus, 2-guttulatis, in asci parte super. conglobatis, utrinque acutiusculis, levibus, $8-9 \times 2$.

Hab. ad folia dejecta putrescentia Arundinis Donacis in silva Santa Catalina pr. Buenos Aires Argentina.

18. *Helotium crastophilum* Sacc., in Ann. Mycol. X (1912) p. 312. — 5497
 Subsparsum, ceraceum, totum albido-flavidum, minutum, stipitato-infundibuliforme, glabrum; cupula 300-400 μ . alta, 250 μ . lata, etiam in sicco aperta, margine integro, contextu anguste prosenchymatico; stipite paullo obscuriore, cylindrico, $250 \times 80-90$; ascis cylindraceis, breve stipitatis, apice rotundatis, paraphysibus filiformibus, copiosis obvallatis, octosporis, $110-130 \times 12-14$; sporidiis oblique monostichis, navicularibus, utrinque obtusule tenuatis, $20 \times 5-6$, granuloso-guttulatis, hyalinis.

Hab. in culmis putrescentibus dejectis, Lyndonville New York Amer. bor. Oct. 1911 (FAIRMAN). — A speciebus graminicolis probe diversum.

19. *Helotium tetrascoporum* Rea, Trans. Brit. Myc. Soc. 1908, v. III 5498 (1909) p. 129. — Ascomatibus stipitatis, cupuliformibus 1,5-2 mm. alt., 0,5 mm. latis, disco ochraceo, extus pallidioribus, glabris, marginibus inflexis; substantia subconcolori, ceraceo-subgelatinosa; ascis clavatis, J -, constanter tetrasporis, $125-130 \times 8-9$, paraphysibus filiformibus, ramosis, septatis, apice leniter subincrassatis, $145-155 \times 1-1,5$; sporidiis oblongo-ellipsoideis, hyalinis, primo conti-

nuis, triguttulatis, monostichis, dein maturis distichis, biseptatis, 21-27 \approx 3,5-4,5.

Hab. ad culmos siccos Phalaridis arundinaceæ prope Perth Britannia (J. MENZIES).

20. *Helotium* ? *phœolomum* (Lév.) Sacc. et Trott., *Peziza phœoloma* 5499
Lév. in Demid. p. 97, t. IV, f. 7. — Gregarium, 1 mm. altum, obconicum, nudum; disco concavo fuscescente, margine præminente saturatius fusco; stipite brevissimo crasso albicante.

Hab. in culmis Andropogonis? (*racine à balais*) Skuloni in Tauria.

21. *Helotium pezizoideum* Cooke — Syll. X, pag. 9 — var. *quadri-* 5500
nucleatum Starb. Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) pag. 4. — Ascomatibus gregariis vel sparsis, turbinatis, deinde applanatis, citrinis; ascis anguste clavatis, sursum rotundatis, longissime pedicellatis, 75-90 \approx 5-5,5; sporidiis octonis, mono- vel distichis, clavulato-fusoideis, quadri-nucleatis, 7,5-9 \approx 2.

Hab. in ligno mucido, Tatarenda Gran Chaco, Bolivia.

22. *Helotium aurantiacum* Gill. Champ. de France, Discom. (descri- 5501
ptio deest in textu) fig. 74. — Ascomatibus solitariis v. binis connexis, valde irregularibus, brevissime stipitatis; disco convexo e rubescenti aurantiaco, ambitu plano (non marginato) demum varie inciso-lobato; stipite brevissimo crasso obconico, in disci partem inferiorem albam sensim abeunte et itidem albo; ascis cylindraceis, apice rotundatis, deorsum sensim tenuato-stipitatis, octosporis; paraphysibus filiformibus 1-2-furcatis; sporidiis oblique monostichis ovoideis, apice altero rotundato, altero acutato, pluriguttulatis, hyalinis.

Hab. in fragmentis ligneis in Gallia. — Videtur species majuscula (ex icone circ. 1 cm. lata) et macrospora, tamen dubia.

23. *Helotium subrubescens* Rehm, Ann. Mycol. VII (1909) p. 524, 5502
Ascom. Exsicc. fasc. 45, n. 1852. — Ascomatibus gregariis, interdum pluribus arcte congregatis, in cortice incrassato ramuli terræ infossi putrescentis sessilibus, primitus globoso-clausis, dein cyathoides, crasse marginatis, 1-4 mm. diam., siccis complicatis involutisque, in stipitem versus basim tenuiorem, cylindraceum, subcurvatum, 1-2 cm. longum, 0,5-1 mm. lat. abeuntibus, extus glabris, dilute rubescentibus, siccis dilute alutaceis, albido-pruinosis, ceraceis, prosenchymatice contextis; ascis cylindraceo-clavatis, apice rotundatis, 60 \approx 5, octosporis, jodo cærulescentibus; sporidiis

bacillaribus v. subclavatis, rectis, 1-cellularibus, hyalinis, $7-8 \times 1,5$, distichis; paraphysibus filiformibus, subacutatis, paullulum prominentibus, hyalinis, $2-2,5 \mu$. cr.

Hab. in ramulo putrescente, Madison Wisc. Amer. bor. (B. A. DODGE).

24. *Helotium obconicum* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5503

CXVIII, Abt. I (1909) p. 389, cum icon. — Ascomatibus sparsis, raro binatis, obconoideo-turbinatis, disco concavo, basi breviter angustatis, pallide flavo-ceraceis, disco obscuriore, $2-2,5 \times 1,5-2$ mm., margine obtuso crassiusculo, sicco subrevoluto; exipulo 50μ . circ. cr. ex hyphis hinc inde extus filiformiter prominentibus; hymenio 150μ . cr.; hypothecio 1 mm. circ. cr. laxo subspongioso, plectenchymatico; ascis cylindraceo-clavatis, supra angustatis obtusis, basi in pedicellum brevem crassum tenuatis, $125-140 \times 11-12$, octosporis; paraphysibus filiformibus $1,5 \mu$. cr. apice obtusulis, crassiusculis, ascum parum superantibus; sporidiis subdistichis, hyalinis, ellipsoideo-fusoideis, apice obtusulis v. subacutatis, plerumque grosse biguttulatis, tenuiter tunicatis, unilocularibus, $17-24 \times 6-7$, J +.

Hab. in ligno duro putri dejecto, Tjibodas in insula Java. —
— *Hel. subturbinato* P. Henn. affine.

25. *Helotium Marchantiæ* (Berk.) Fr. — Syll. VIII, p. 246 — var. 5504

Conocephali Boyd. Trans. Br. Myc. Soc. III, 1908, 2, p. 113 (1909). — Ascomatibus magnitudine variabilibus, primum pallidis, dein obscure brunneis, plerumque in maculis pallidis insidentibus; sporidiis oblongis fusoideis, latiusculis, $18-21 \times 5$; paraphysibus in massa brunneolis.

Hab. ad thallum *Conocephali conici*, Dalry Ayrshire, Britannia. — A typo differt sporidiis latioribus et maculis albicantibus matricis.

26. *Helotium amœnum* (Pat.) Sacc. et Trott., *Pachydisca amœna* Pa- 5505

touill. Bull. trim. Soc. Myc. de France, vol. XXI (1905) p. 120. — Ascomate carnosio, molli, $0,5-1,5$ mm. diam., roseo-pallido vel violaceo, glabro, cylindraceo, apice truncato, primum plano dein leniter depresso, demum convexo et parum expanso; ascis cylindraceis sensim in basim attenuatis, apice truncatis et poro marginato dehiscentibus, jodi ope non cyanescentibus, $60-90 \times 8-10$, 8-sporis; paraphysibus copiosis, rectis, cylindraceis, 2μ . cr., hyalinis, simplicibus, guttulis refringentibus præditis; sporidiis distichis, ovoideis, hyalinis, levibus, $6-8 \times 3-4$, granulatis.

Hab. parasitica ad thallum *Ricciæ* sp., Alger, Algeria Africae bor. (TRABUT). — *Pezizellæ* (*Epiglicæ*) *glæocapsæ* affine.

27. *Helotium chordicola* Speg., Fungi Arg. IV, in An. Mus. Buenos Aires (1909) p. 445. — Ascomatibus sessilibus, subceraceis, subinatis, parvulis, laxè gregariis, orbicularibus, 2-3 mm. lat., margine integerrimis, planiusculis; ascis linearibus 50-55 \times 5, octosporis, modice tenuato-pedicellatis, paraphysibus capitato-clavulatis obvallatis; sporidiis elongato-ellipsoideis, subrectis, oblique monostichis, utrinque acutiuscule rotundatis, 6-8 \times 3-3,5, hyalinis, eguttulatis.

Hab. in chorda putrescente inter folia delapsa, La Plata, Argentina.

28. *Helotium griseolum* von Höhnelt, Sitzb. k. Akad. d. Wiss. Wien CXVIII, Abt. I (1909) p. 388. — Ascomatibus arcte gregariis, sæpe compluribus adnatis, 400-500 μ . diam., disco pallide v. obscure griseo, depresso, extus griseolis, basi obscurioribus, stipite 200-250 \times 100-150; contextu subprosenchymatico, hypothecio crasso; excipulo extus breviter ob hyphas prominentes inflatas molle verruculoso; ascis clavatis longe pedicellatis, octosporis, tenuiter tunicatis, 65-68 \times 5-6; sporidiis mono- v. distichis, hyalinis, unilocularibus, elongato-ellipsoideis, acutis v. obtusulis, 5-6 \times 1,5-2; J +.

Hab. in hymenio Polypori concrepcentis vetusti, Tjibodas in ins. Java.

29. *Helotium albo-fuscidulum* Rehm, Österr. Botan. Zeitschr. LVI (1906) p. 346. — (Nomen nudum).

Hab. in caulibus emortuis *Aconiti* sp. Schrofenspass Tiroliae.

PHIALEA (Fr.) Gill. — Syll. VIII p. 251, X p. 9, XI p. 403, XIV p. 765, XVI p. 727, XVIII p. 54.

1. *Phialea turbinata* Syd., Ann. Myc. V (1907) p. 397; Mycoth. germ. 5509. — Ascomatibus plerumque gregariis, rarius sparsis, primo clausis, dein apertis, eximie turbinatis, disco pallido tenuiter marginato, extus parte cupulae superiore pallida, parte cupulae inferiore atro-grisea, levibus, siccis vix complicatis, 0,2-0,5 mm. latis, ceraceis; stipite 0,3-0,55 mm. alto, 90-150 μ . crasso, basi leniter crassiore ibique 120-180 μ . crasso, superne atro-griseo, inferne dilutiore, levi, vix striato; ascis cylindræis, apice rotundatis, 35-40 \times 4-5 $\frac{1}{2}$, octosporis; sporidiis bacillaribus, continuis, hyalinis, plerumque rectis, 7-8 $\frac{1}{2}$ \times 1 $\frac{1}{2}$ -2 $\frac{1}{2}$, paraphysibus filiformibus, ascos parum superantibus.

Hab. in caulibus putrescentibus *Ranunculi* spec. Eube pr. Gersfeld, prov. Hessen-Nassau Germaniæ.

2. *Phialea cyathoides* (Bull.) Gill. — Syll. VIII, pag. 251 — var. 5510
minor Rehm, in Bubák Bull. Herb. Boiss. 2 sér. VI (1906) p. 398.
 — Ascomatibus circ. 0,5 mm. alt., 0,3-0,45 mm. latis, humidis brunneolis, siccis fere brunneis; stipite 0,15-0,2 mm. longo, circ. 0,085 mm. cr.; ascis 40-45 \times 4-4,5; sporidiis 7-9 \times 1,5.

Hab. in caulibus senioribus *Ranunculi* Villarsii, prope Andrijevica sub Hasanac Planina 1000-1400 m. alt. Montenegro.

3. *Phialea stamnarioides* Rehm, Ann. Mycol. V (1907) pag. 534. — 5511
 Ascomatibus gregariis, sessilibus, primitus subglobosis, dein disco explanato orbiculari, plano vel convexulo, tenuiter marginato, 0,2-1 mm. diam., brevissime cylindraceo-stipitatis, 0,5 mm. alt., dilutissime lutescentibus, glabris, primitus subgelatinosis, excipulo pro-senchymatico; ascis clavatis, apice rotundatis, subcurvatis, 150-160 \times 10-12, octosporis, jodo immutatis; sporidiis subfusiformibus, obtusis, subcurvatis, 1-cellularibus, utroque apice guttulatis, hyalinis, 15-18 \times 5, distichis; paraphysibus filiformibus, hyalinis, circ. 2,5 μ . lat.

Hab. ad caules putrescentes *Aconiti* variegati, Scheideck infra montem Virginis Helvetiæ (Rehm). — Prima ætate subgelatinosa, hinc ad *Stamnariam* nutans.

4. *Phialea Lychnidis* Ces. ap. Klotzsch, Herb. viv. mycol. n. 1616 5512
 (1852).

Hab. ad caules *Lychnidis* dioicæ, Vercelli Ital. sup. — Ex Rabenh. forma *Phialeæ cyathoides*.

5. *Phialea bicolor* Starb. — Syll. XIV, pag. 765 — var. 5518
alpestris Rehm, Ascom. Exsicc. fasc. 46, n. 830 b, Ann. Mycol. (1910) p. 303. — Stipite crasso, multo pallidiore, demum longitudinaliter plicato; J -.

Hab. in caulibus *Arniciæ* montanæ, Söllereck Algoviæ Germaniæ.

6. *Phialea phyllophila* (Desm.) Gill. — Syll. VIII, pag. 274 — var. 5514
Jaapii Rehm, in Jaap Abh. Bot. Ver. Prov. Brandenb. IL (1907) p. 10. — A typo differt præcipue sporidiis eguttulatis.

Hab. ad nervos foliorum *Populi* canadensis pr. Triglitz in Brandenburgia.

7. *Phialea minutula* Bres. in Strasser, III Nachtr. Pilz. Sonntagb. 5515
 (Verhandl. zool. bot. Gesell. Wien 1905, p. 612). — Ascomatibus gregariis, stipitatis, minutissimis, vix 0,5 mm., cum stipite, altis,

albis, margine pruinosis; hymenio concolore; stipite stramineo; ascis clavatis, 36-40 \times 4,5-5, jodo poro cærulescentibus; paraphysibus filiformibus; sporidiis subfusoides, 5-7 \times 2,5.

Hab. ad ligna mucida arborum frondosarum, Sonntagberg Austriae inf.

8. *Phialea obscura* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 116. 5516

Ascomatibus sparsis, ceraceo-membranaceis v. subcoriaceis, stipitatis, cupulatis, extus cinereo-fuscis, pruinosis, venosulo-rugulosis; disco concavo, levi, atro-fuscululo, 2-2,5 mm. diam.; stipite tereti, farcto, fusco-cinereo, pruinoso, 1-2 mm. long.; ascis cylindraceo-clavatis, obtusis, octosporis, 40-45 \times 4, paraphysibus filiformibus, c. 2 μ . cr., hyalinis, intus fuscicululo-granulatis; sporidiis oblique monostichis v. subdistichis, oblongo-fusoides, rectis vel curvulis, utrinque acutiusculis, intus fuscicululo-granulatis, hyalinis, 7-8 \times 2,5.

Hab. in cortice arborum, Amani Ost-Usambara Africae centr. (EICHENBAUM).

9. *Phialea Queletii* Sacc. et Trav. — Syll. XX, pag. 331 — *Peziza* 5517

gracilis Quéf. Champ. Jura et Vosg. II, p. 406, t. V, f. 6 (1873), non Cooke et Peck, *Phialea gracilis* Gill. Champ. Fr. Discom. p. 99, fig. 172. — Ascomatibus stipitatis; stipite filiformi, 2-3 cm., long., pallide griseo; cupula ceracea, tenui, pruinosa, urceolata, dein concava, demum applanata, 1 cm. lata, cinereo-pallida, albo-marginata; disco cremeo-griseo; ascis cylindraceis deorsum leviter tenuatis, octosporis; sporidiis oblique monostichis, ellipsoideis vel pruniformibus, 10 μ . longis.

Hab. in ramulis dejectis foliis obtectis, Jura Galliae.

10. *Phialea euspora* Rick, Broteria V (1906) p. 35. — Ascomatibus 5518

convexo-depressis, crassiusculis, margine recto, plerumque integro, regulariter orbicularibus, flavis, usque ad 4 mm. latis, hymenio cereo, subtiliter velutino, separabili ab hypothecio, extus albidis, rugosis, sericeis, in stipitem 1-2 mm. longum, crassum et pubescentem, basi nigra, abeuntibus; ascis 170-180 \times 12; sporidiis ellipsoideis v. rotundatis, 12 \times 6, grosse uniguttulatis, unilocularibus, uniserialibus; paraphysibus hyalinis, filiformibus, paucis.

Hab. ad folia putrida, marginem et petiolum sequens, Rio Grande do Sul Brasiliae. — Sporid. et hymenio imitatur *Eupezizas*, modo vegetandi *Phialeam Sydowianam*.

11. *Phialea scutula* (Pers.) Gill. — Syll. VIII, p. 266 — var. *epi-* 5519

calamia (Karst.) Sacc. Fungi ital. fig. 1339, *Helotium scutula* var. *epicalamium* Karst. Myc. Fenn. I, p. 111 (1871), *Michelia* I, p. 427.

— Typo subsimilis sed multo minor et gracilior; sporidiis aciculari-elongatis, rectis curvulisve, 19-24 \times 3-4, bi-quadriguttatis.

Hab. ad calamos *Tÿphæ latifoliæ* in Fennia et graminum majorum, Conegliano et Sermide Ital. bor.

12. *Phialea nivalis* Rehm, Ann. Myc. III (1905) p. 411 et Ascom. 5520

exsicc. fasc. 35, n. 1606. — Ascomatibus dispersis, plerumque solitariis, sessilibus, globuloso-cyathoides, in stipitem brevissimum elongatis, glabris, albidulis, versus marginem fuscidulis, demum dilute fuscis, 200-210 μ . diam. et alt., prosenchymaticis, siccis globoso-involutis, extus subfarinaceis; ascis cylindraceutis, apice subacutatis, sessilibus, 50-55 \times 6-8, octosporis, poro jodo dilute tincto; sporidiis fusiformibus, rectis vel subcurvatis, 1-cellularibus, hyalinis, 12-15 \times 3, distichis; paraphysibus filiformibus, hyalinis, 2,5 μ . lat., ascos superantibus.

Hab. ad folia graminea putrida inter *Rhododendra ferr.* in suprema parte vallis Zillertal Tiroliae (Dr. REHM). — Minutiae ascomatum et sporidiorum a *Ph. culmicola* mox distinguenda.

13. *Phialea incertella* Rehm in Sydow, Myc. germ. n. 505 et Ann. 5521

Myc. IV (1906) pag. 485. — Ascomatibus plerumque gregariis, cyathoides, primitus clausis, dein urceolatis, disco subhyalino, tenuissime, haud pruinose marginato, in stipitem crassum brevissimum elongatis, 0,2-0,25 mm. latis et altis, excipulo glabro, fusco, prosenchymatico, siccis nigro-fuscidulis; ascis clavatis, apice rotundatis, 30-40 \times 5-6, octosporis, poro jodi ope tincto; sporidiis fusiformibus, rectis, utrinque acutatis, 1-cellularibus, hyalinis, 5-6 \times 1 $\frac{1}{2}$ -2, distichis; paraphysibus partim apice lanciformiter acutatis, hymenium longe superantibus, in medio 5-7 μ . latis, partim filiformibus, hyalinis, 2 μ . latis.

Hab. ad folia emortua *Kœleriae cristatæ*, prope Erfurt (H. DIEDICKE). — Proxima *Ph. eburnea* Rob. et Desm. colore dilutiore, sporidiis (sec. Karsten in Hedwigia 1893, p. 69) modo 4-6 \times 0,5 diversa.

14. *Phialea epibrya* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. d. 5522

Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 136. — Ascomatibus sparsis, solitariis, subsessilibus, obconoideis, depressis v. concaviusculis, 420-450 μ . latis, breviter pallideque marginatis, e rubido vitellinis, glabris, ceraceis; contextu minute fibroso-parenchymatico, e rosaceo flavido; ascis octosporis, sessilibus, clavatis, 50-60 \times 8-9, paraphysibus filiformibus 1,5-2 μ . cr. obtusis obsitis; sporidiis hyalinis, distichis, elongatis v. subclavatis, rectis v. vix curvulis,

unilocularibus, minute granuloso-farctis, eguttulatis, 12-18 \times 3-4, utrinque obtusis; excipulo tenui.

Hab. in foliis *Hypni* sp. prope Saar Moravia, Austria.

15. *Phialea gibba* (A. S.) Sacc. VIII, p. 271 est *Cyphella infundibuliformis* (Schäff.) Fr. — Syll. VI, p. 668 — seu *Omphalia gibba* (A. S.) Pat. Ic. n. 560, nec discomyceta.

PEZIZELLA Fuck. — Syll. VIII p. 275, X p. 10, XI p. 405, XIV p. 768, XVI p. 729, XVIII p. 57.

1. *Pezizella lanceolato-paraphysata* Rehm, Ann. Mycol. VI (1908) 5523 p. 316. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculariter expanso, plano, tenuissime marginato, flavidulo, 0,3-0,8 mm. diam., siccis irregulariter contractis, versus basim angustatis, albidulo-marginatis; excipulo pseudoparenchymatico, versus marginem non dilacerato, glabro; ascis clavatis, apice rotundatis, 30 \times 5-7, octosporis, jodo immutatis; sporidiis clavatis, rectis, hyalinis, 1-cellularibus, 6-8 \times 2, distichis; paraphysibus lanceolato-acutatis, longe prominentibus, hyalinis.

Hab. ad caules siccos *Spirææ Filipendulæ*, Lyndonville New York Amer. bor. (Dr. FAIRMAN). — A *Pez. deparcula* et *Heliotio scrupuloso* probe distincta.

2. *Pezizella epidemica* Rehm, Ann. Mycol. III (1905) p. 225, Ascom. 5524 exs. n. 1581. — Ascomatibus in hypophyllo demum maculatum flavescens gregariis, sessilibus, primitus globoso-clausis, dein patellaribus, disco plano distincte marginato, versus basim fuscidulam angustatis, glabris, hyalino-flavidulis, 200-300 μ . diam., siccis albidulis vel dilute brunneolis, excipulo pseudoprosenchymatice tenuiter contexto, versus marginem discretis cellularum seriebus, 3 μ . cr., ad apicem obtusis instructo; ascis clavatis, apice rotundatis, jodo immutatis, 50-60 \times 9-10, 8-sporis; sporidiis ellipsoideis, 1-cellularibus, guttas 2 oleosas includentibus, hyalinis, 8-10 \times 4-5, distichis; paraphysibus filiformibus, septatis, hyalinis, 1,5 μ . versus apicem 2-3 μ . cr.

Hab. ad folia viva *Epilobii angustifolii* in cacumine montis Fichtelberg Erzgebirg W. KRIEGER. — Affinis *Pezizellæ minutissimæ* (Karst.) Rehm = *Mollisia minutissima* Karst. — Syll. VIII, p. 327.

3. *Pezizella Elasticæ* Koord., Botan. Untersuch., (1907) pag. 161. — 5525 Ascomatibus gregariis, ceraceo-membranaceis, tenuibus, discoideis,

subsessilibus, glabris, levibus, aurantiaceis, in sicco fuscescentibus, 0,6-0,9 mm. diam.; ascis³ tereti-clavatis, apice haud incrassatis, 40-55 \times 3-4, filiformi-paraphysatis, octosporis; sporidiis fusiformibus 8-8,5 \times 1,5-2, continuis, hyalinis, utrinque acuminatissimis.

Hab. in foliis emortuis *Fici elasticæ* prope Loano prov. Kedu Java (KOORDERS).

4. *Pezizella platensis* Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 446. — Parva, tabacina, sessilis, subrigidula, sparsa, uda appanato-expansa, 0,5-1,5 mm. diam., sicca contracto-subglobosa, disco atro-plumbeo, margine acuto, integro; ascis subclavatis, aparaphysatis, apice rotundatis deorsum tenuatis modiceque pedicellatis, 60 \times 4-5, octosporis, jodo immutatis; sporidiis parvis, fusoido-subcymbiformibus, utrinque acutiusculis, mono- v. distichis, 8-10 \times 2-2,5, hyalinis, eguttulatis.

Hab. ad ramos corticatos *Casuarinæ strictæ* putrescentes in Parque La Plata, Argentina.

5. *Pezizella hyalino-sulphurea* Rehm in Bachman, Proceed. Ohio State Ac. of Sc. v. V, P. II (1909) n. 14, pag. 56. — Ascomatibus in superiore folii pagina dispersis, sessilibus, primitus globoso-clausis, dein patellaribus, disco plano tenuissime marginato, extus glabris, versus basim angustatis, hyalino-sulphureis, 200-250 μ . diam., excipulo pseudoparenchymatice contexto, ad marginem cellulis 8 \times 1,5 elongatis, obtuse fimbriato, siccis citrinulis, concavis; ascis clavatis, apice rotundatis, 25-30 \times 5-6, jodo cærulescentibus, 8-sporis; sporidiis oblongis, rectis, utrinque rotundatis, 1-cellularibus, hyalinis, 5-7 \times 2-2,5, distichis; paraphysibus filiformibus, hyalinis 2 μ . crassis.

Hab. ad folium putridum *Fagi*, Oxford O., Amer. bor.

6. *Pezizella Jaapii* Rehm, in Jaap Abh. Bot. Ver. Prov. Brandenb. IL (1907) p. 9. — Ascomatibus gregariis, sessilibus, primum globoso-clausis dein rotundato-apertis expansis, tenue marginatis, flavis; excipulo basi subnodoso, extus levi, parenchymatico, pallido, margine hyphis obtusis flavidis 4 μ . cr., siccis albo-flavis prædito 0,3-0,7 mm. diam.; ascis elongato-clavatis, supra rotundatis 30-35 \times 4-5, tetrasporis, J +; sporidiis fusoidis v. acicularibus, supra subobtusis, rectis v. leniter curvulis, unilocularibus, hyalinis, 15-17 \times 1,5-2, distichis; paraphysibus filiformibus, septatis, obtusis, hyalinis, 1,5 μ . cr.

Hab. in foliis putrescentibus *Betulæ verrucosæ* nec non in foliis *Populi*, *Quercus*, *Fagi* prope Triglitz in Branden-

burgia. — *Pez. leucellæ* (Karst.) Sacc. affinis, sed differt colore et ascis tetrasporis.

7. *Pezizella Fairmani* Rehm, Ann. Mycol. V (1907) p. 519. — Asco- 5529
matibus dispersis, sessilibus, primitus globosis, dein explanatis, disco orbiculari tenuissime marginato, extus glabris, 250-270 μ . d., hyalino-subflavidulis, siccis plerumque convolutis, flavidulis, excipulo tenuissimo prosenchymatico; hyphis ad marginem subelongatis, obtusis, 4 μ . cr.; ascis clavatis, apice rotundatis, 30-35 \times 6-8, octosporis, jodo immutatis; sporidiis ovoideis, 1-cellularibus, hyalinis, 6-7 \times 3, distichis; paraphysibus filiformibus, versus apicem 3 μ . cr., hyalinis.

Hab. in ligno *Tsugæ canadensis*, Lyndonville New York Amer. bor. (FAIRMAN). — *Pulchella* exigua species.

8. *Pezizella virens* (A. et S.) Rehm Disc. p. 662, *Peziza virens* Alb. 5580
et Schw. Fung. Lusat. p. 338, t. X, f. 10, Cooke *Grevillea* III (1875) t. 51, fig. 257. — Ascomatibus minutis, sparsis v. gregariis, crustula effusa obsolete virescente insertis, disco regulari, albido v. dilute rubescente, levi, tenuiter marginato præditis, subdiaphanis, siccis albis.

Hab. in truncis cavis putrescentibus Pinorum in silvis umbris Lusatiæ. — Observante cl. Rehm, forte congruit cum *Micrarcea prasina* Fr. lichenibus adscripta, quæ gaudet ascis clavatis, octosporis, sporidiis oblongo-ovoides, continuis dein bicellularibus, hyalinis 9-11 \times 3.

9. *Peziza subcinerea* Rehm, Ann. Mycol. V (1907) p. 519. — Asco- 5531
matibus dispersis, sessilibus, primitus globoso-clausis, dein disco orbiculari, tenuiter marginato, plano, hyalino, 0,5-2 mm. diam., extus glabris, cinereo-hyalinis, siccis subinvolutis, excipulo parenchymatico hyalino, versus marginem ex hyphis elongatis contexto, hyphis marginalibus haud distantibus, obtusis; ascis clavatis, ad apicem rotundatis, 50 \times 5-7 octosporis, jodo cærulescentibus; sporidiis oblongis, utrinque obtusis, 1-cellularibus, rectis vel subcurvatis, hyalinis, 6-7 \times 2, distichis; paraphysibus hyalinis, 3 μ . cr.

Hab. ad lignum mucidum, Madison Amer. bor. (HARPER). — *Pezizella carneo-flavæ* affinis sed colore sporidiisque plane distincta.

10. *Pezizella obscurata* Rehm, Contr. Myc. Hung. (Növ. Közl. 1905, 5532
p. 5). — Ascomatibus dispersis, sessilibus, primitus globoso-clausis, dein urceolatis, tenuissime marginatis, olivaceis, extus glabris, excipulo ad basim parenchymatico, supra prosenchymatico, fusco-

flavidulo, 0,2-0,3 mm., ceraceis, siccis corrugatis, nigris; ascis clavatis, apice rotundatis, 40-45 \times 5-6, octosporis, jodo immutatis; sporidiis oblongis, obtusis, utroque apice guttulis, 1-cellularibus, hyalinis, 4-5 \times 2, distichis; paraphysibus filiformibus, hyalinis, 2-2,5 μ .

Hab. ad frustula lignea, Berencsfalu, prope Selmeczbánya, Hungaria (KMET). — Proxima *Pezizellæ granulose* (Karst.) Rehm quoad formam, sed colore olivaceo, ascis jodo non tinctis et sporarum minutie plane diversa species.

11. *Pezizella rectispora* (Boud.) Sacc. et Trav. — Syll. XX, p. 321 5538

— *Hyalinia rectispora* Boud., Icon. Mycol. t. III, tab. 467, Hist. et Classif. Discomyc. Europe (1907) p. 103. — Minutissima 0,3-0,6 mm. lata, convexula, pallide cinereo-lutescens; ascis minutis, cylindricis, sæpe ad basim appendiculatis, octosporis, inoperculatis et ad apicem truncatis, 33-38 \times 2,5 μ , paraphysibus hyalinis, simplicibus aut divisis, tenuibus, ad apicem non capitatis, 1,5 μ . cr.; sporidiis bacillaribus, rectis, ramis subflexuosis, 7-9 μ . longis, 1,5 μ . cr., intus non granulosis.

Hab. ad folia putrida *Scirpi* silvatici in paludosis, Ecouen Galliæ.

12. *Pezizella fuscescens* Rehm, Verh. zool.-bot. Gesell. Wien LVII 5534

(1907) p. 329. — Ascomatibus in maculis brunneis rotundatis 1-2 cm. lat. hypophyllis sparse insidentibus, primum globoso-clausis, dein discum planum, rotundatum, raro parum prominentem, tenui-marginatum ostendentibus, extus glabris, brunneis, c. 300 μ . d. excipulo grosse parenchymatico, ad marginem ciliolatis, siccis, brunneis, quandoque albo-ciliatis, tenui-ceraceis; ascis clavatis, apice obtuse acutatis, 50-70 \times 10-12, octosporis, J +; sporidiis clavatis apice obtusis, crassis, rectis, unilocularibus (an demum uniseptatis?), utrinque uniguttulatis, hyalinis, 15-18 \times 3-3,5, distichis; paraphysibus filiformibus c. 2 μ . cr., hyalinis.

Hab. ad folia emortua *Caricis pendulæ* in silvis Sonntagsberg Austriæ inf.

13. *Pezizella sepulta* Rehm, Ascom. exsicc. fasc. 37, n. 1653, Ann. 5535

Mycol. IV (1906) p. 405. — Ascomatibus dispersis, primitus clausis, dein patellaribus, disco orbiculari tenuissime marginato, plano, albo, excipulo glabro, hyalino, pseudoparenchymatice contexto, 150-200 μ . diam., siccis subglobosis; ascis clavatis, apice obtuse acutatis, late sessilibus, 20-25 \times 5-6, J +, octosporis; sporidiis fuscoideis, plerumque curvatis, utrinque acutatis, unilocularibus, guttula o-

leosa utrinque præditis, hyalinis, 8-9 \approx 2, distichis; paraphysibus filiformibus, 1 μ . cr., haud clavatis, hyalinis.

Hab. fasciculo putrescente Junci Hostii, Alpeiner-Alpe pr. Stubai Tyrolia (Rehm). — *Pezizella turgidellæ* (Karst.) Rehm affinis sed ascomatibus incoloribus, ascis minoribus.

14. *Pezizella subglacialis* Rehm, Hedwigia XXVIII (1889) p. 348. 5536

— Ascomatibus sessilibus, primitus globosis, clausis, dein urceolatis, demum patellaribus, 0,15-0,5 mm. lat., dilute flavidulis, siccis sæpe subfuscis et plicatis, disco hyalino; basi parenchymatice cellulis minutis composita, versus marginem pseudoprosenchymaticis, hyalinis, subtus denique hyphis simplicibus, brevibus, 5 μ . lat., fuscis obsessis; ascis clavatis, apice obtuse acutatis, 45-50 \approx 6-7, octosporis; sporidiis fusiformi-oblongatis, obtusis, rectis, unicellularibus, utroque apice plerumque guttulis oleosis instructis, hyalinis, 9-10 \approx 1,5-2, distichis; paraphysibus filiformibus, haud clavatis, 2 μ . cr., hyalinis; poro ope J. cærulescente.

Hab. ad culmos putrescentes Nardi strictæ «Hochjoch» Oetz Tirolia.

15. *Pezizella tumidula* (Rob. et Desm.) Sacc. — Syll. VIII, p. 276 5537

— var. *Rhododendri* Rehm, Österr. bot. Ztschr. LVI (1906) p. 345. (Nomen nudum).

Hab. in foliis putrescentibus *Rhododendri hirsuti*, Schrofenspass Tirolia.

PSEUDOHELOTIUM Fuck. — Syll. VIII p. 291, XI p. 406, XIV p. 772, XVI p. 729, XVIII p. 63.

1. *Pseudohelotium minutellum* (Boud.) Sacc. et Trav. — Syll. XX, 5538

p. 536, *Hyaloscypha minutella* Boud., Icon. Mycol. t. III, tab. 522 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 127. — Minutissima, 0,2-0,4 mm. lata, alba aut nivea, subhyalina, sessilis, margine subfimbriato; ascis octosporis, claviformibus, 65-70 \approx 10, inoperculatis; paraphysibus filiformibus, ad apicem vix incrassatis, simplicibus aut ad basim divisis, 3 μ . cr.; sporidiis hyalinis, cylindrico-fusoideis, leniter curvatis, guttulis oleosis sat crassis extremitatibus positis, faretis, 14-16 \approx 3-4.

Hab. in ligno putri Cerasi, Montmorency, Gallia.

2. *Pseudohelotium Ulmaria* (Boud.) Sacc. et Trott., *Urceolella Ulma-* 5539

ria Boud., Icon. Myc. t. III, tab. 535 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 129. — Minutissima, lutea, 0,2-0,3 mm. lata, sessilis, extus puberula, pilis acutis, flexuosis, non aut ad ba-

sim tantum septatis, intus granulosus, 15-40 \times 2-3; ascis minutis, sat amplis, octosporis, foramine immarginato, 30-40 \times 7-8; paraphysibus cylindricis, intus guttulis oleosis luteis repletis; sporidiis fusoides-clongatis, acutis, intus omnino granulosus medio minute vacuolatis, 15-18 \times 3.

Hab. in petiolis putrescentibus Spirææ Ulmariae in silvis Montmorency Gallia. — *Pseudohelotio deparculo* affine sed differt colore citrino, ascis octosporis, sporidiis majoribus, intus granulosus.

3. *Pseudohelotium microspermum* Speg., Myc. Arg. IV, in An. Mus. 5540 Buenos Aires (1909) p. 446. — Minutum, laxe gregarium, vix pedicellatum, tenuissime puberulum, extus cinerescens intus testaceum, orbiculare, 0,5-1 mm. diam., pilis cylindraceis subcontinuis 20-40 \times 3; ascis subclavulatis, apice rotundatis, brevissime crasseque pedicellatis, 30 \times 4, octosporis, parce filiformi-paraphysatis; sporidiis recte distichis, e fusoides-navicularibus, utrinque obtusulis, 4-6 \times 1,5, biguttatis v. diblastis, hyalinis.

Hab. ad ramos emortuos decorticatos Solani verbascifolii in silva Santa Catalina pr. Buenos Aires Argentina.

4. *Pseudohelotium glaucum* Speg., Fungi Chilenses (1910) pag. 122, 5541 cum icon. — Ascomatibus sparsis v. laxissime turbinato-patellariibus, brevissime pedicellatis, 1-2 mm. diam., tenuibus glaucis, extus pruinosis, pilis minimis hyalinis subunicellularibus levibus sed subnodulosis, 25-50 \times 2-3; ascis linearibus subclavulatis obtusiusculis, paraphysatis, 50 \times 5-6, octosporis; paraphysibus 55-60 \times 1-1,5; sporidiis lineari-subfusoides parvulis hyalinis, 8-10 \times 1,25-1,50.

Hab. ad pedunculos siccos putrescentes Lobeliae Tupæ pr. Ciudad de Valdivia Chile Amer. austr. — E grege *Eu-Pseudohelotii*.

5. *Pseudohelotium ammoides* Sacc., Ann. Mycol. VI (1908) p. 564. — 5542 Dense v. laxe gregarium, superficiale, minutum, granuliforme, albidomelleum, ceraceum; ascomatibus urceolatis demum late apertis, 350-370 μ . diam., albo-pruinosis, contextu minute celluloso, cellulis sphaeroideis, ad marginem oblongis; ascis clavatis, apice summo truncatulis, deorsum sensim crasse tenuatis, 60-80 \times 8-9, octosporis; paraphysibus bacillaribus, subæqualibus; sporidiis in parte super. asci distichis obovatis, obtusis, 8,5-9 \times 2,5-3, hyalinis, eguttulatis.

Hab. in corticibus dejectis Carpini in silvis Lyndonville Amer. bor. (FAIRMAN). — Affine *Pseudohel. puberulo*, sed sporidia utrinque obtusa nec attenuata etc.

MOLLISIA (Fr.) Karst. — Syll. VIII p. 321, X p. 12, XI p. 407, XIV p. 774, XVI p. 720, XVIII p. 65.

1. *Mollisia atro-flava* Rehm, Ann. Mycol. V (1907) pag. 546, Sacc., 5543
Myc. ven 731 sub *Niptera cinereæ* forma. — Ascomatibus in ligno subnigrato gregariis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari plano, sæpe tenuiter albidulo-marginato, cinereo-flavidulo, excipulo parenchymatico fusco, cellulis versus marginem elongatis, atro-fuscis præditis 0,3-2,5 mm. latis, ceraceis, siccis complicatis, involutis. scabriusculis; ascis clavatis, apice rotundatis, 45-50 \times 4-5, octosporis, jodo immutatis; sporidiis oblongis, obtusis, rectis vel subcurvatis, 1-cellularibus, hyalinis, 6-8 \times 2, distichis; paraphysibus filiformibus, 2 μ . crassis, haud clavatis, hyalinis.

Hab. in ligno *Rhois* radicans putri in Italia boreali (G. BIZZAZERO).

2. *Mollisia lignicola* Phill. — Syll. VIII, p. 366 (*Pyrenopeziza*) — 5544
var. *viticola* P. Henn., Verh. Bot. Ver. Prov. Brandenb. L (1908) pag. 133. — A typo differt margine ascomatum albido et hyphis hyalinis, septatis prædito, sporidiis plerumque clavatis, disco atro-cinereo; ascis octosporis, 45-52 \times 5,5-7,5; sporidiis 7-10 \times 2,5-3.

Hab. in ramis *Vitis* viniferæ, Tamsel Germania (VOGEL).

— *M.-Myricaricæ* (Rehm) etiam affinis sed differt disco griseo-albo. Nonnullis characteribus etiam ad gen. *Tapesiam* vergit.

3. *Mollisia pallens* (Boud.) Sacc. et Trott., *Mollisiella pallens* Boud., 5545
Icon. Mycol. tom. III, tab. 557 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 142. — Minuta aut minutissima, 0,5-1 mm. lata, albido-cinerea; ascomatibus marginatis extus ad basim furfuraceo-nigrescentibus; ascis clavatis, octosporis, foramine vix marginato, 38-40 \times 7-8; paraphysibus tenuibus, granulosis 2 μ . cr.; sporidiis fusoides, rectis v. curvulis, intus ad extremitates minute granulosis, 8-9 \times 1,5-2.

Hab. ad radices putres *Pruni* spinosæ, Montmorency-Galliæ.

4. *Mollisia ravidæ* Syd., Ann. Mycol. VIII (1910) p. 40. — Ascomatibus hypophyllis, in maculis effusis obsoletis pallidis plus minus copiose insidentibus, sparsis vel aggregatis, sessilibus, glabris, ceraceis, 0,3-0,4 mm. diam, disco rotundo griseolo tenuissime brunneo-marginato; in sicco corrugatis, atro-griseis; ascis clavatis vel cylindraceo-clavatis, apice rotundatis, octosporis, 45-60 \times 9, subsessilibus; sporidiis monostichis vel irregulariter distichis, late ellipsoides, utrinque rotundatis, continuis, eguttulatis, 5-9 \times 4-5, hya-

linis vel hyalino-viridulis; paraphysibus hyalinis, filiformibus, c. 1 μ . crassis.

Hab. in foliis vivis Lagerstroemiæ speciosæ, Lamao, Bataan, prov. Luzon, ins. Philipp. (E. D. MERRILL). — Species minuta, ægre observanda, affinis ut videtur, *Mollisiæ arescenti* et *M. Mikanicæ*.

5. *Mollisia allantoidea* Syd., Ann. Mycol. VI (1908) p. 483. — Asco- 5547
matibus gregariis, rarius solitariis, late sessilibus, hinc inde confluentibus, disco plano tenuiter marginato, flavo-brunneis vel demum brunneis, levibus, 0,3-0,8 mm. diam., ceraceis; ascis clavato-cylindraceis, apice rotundatis, 18-25 \times 3, octosporis, breviter stipitatis; sporidiis distichis, allantoideis, plerumque leniter curvulis, hyalinis, continuis, 3½-5 \times 1; paraphysibus paucis, filiformibus, hyalinis.

Hab. in caulibus Tanacetii vulgaris, Tamsel pr. Cüstrin, Marchia Brandenb. (P. VOGEL). — Species minutie ascorum et sporidiorum probe distinguenda.

6. *Mollisia fagicola* Noelli, Malpighia v. XXIII (1909) pag. 182. — 5548
Ascomatibus gregariis, superficialibus, minutis, sessilibus, 1-1,5 mm. latis, planis, demum convexis, extus glabris, fuscis; ascis elongatis, claviformibus, 8-sporis, 165-180 \times 14-19; sporidiis stipatis in parte superiore asci, elongatis, continuis, hyalinis, apice obtusis, infra acutis, 21-39 \times 2-3; paraphysibus filiformibus, gracilibus, curvulis.

Hab. in foliis Fagi silvaticæ prope Fomarco Val d'Ossola in Pedemontio It. bor.

7. *Mollisia obscurella* (Boud.) Sacc. et Trott., *Mollisiella obseurella* 5549
Boud., Icon. Mycol. t. III, tab. 556 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 142. — Minuta aut minutissima 0,50-1,20 mm. lata, sessilis, applanata, marginata, dein varie undulata, cinereo-lutescens, hymenio fuliginoso, extus glabra; ascis clavatis, minutis, octosporis, ad basim attenuatis, 40-45 \times 7-8; paraphysibus rarioribus, tenuibus, intus subgranulosis, 1,5-2 μ . cr.; sporidiis minoribus, ovato-oblongis, intus non granulosis, 5-6 \times 2-3.

Hab. ad corticem putrem Quercus, Montmorency, Gallia.

8. *Mollisia spectabilis* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII, 5550
(1906) p. 41. — Ascomatibus hypophyllis sparsis, obscure griseis, primum globoso-clausis dein hemisphærico-apertis, 1 mm. circ. d., disco griseo-cyaneo prominenti acute marginato præditis; excipulo valde evoluto, obscure griseo; ascis elongato-clavatis, longe pedunculatis, 80-100 \times 9-10, octosporis; sporidiis hyalinis, eguttulatis, ob-

longis v. oblongo-fusoides, sæpe inæquilateris, 12-15 \times 4; paraphysibus hyalinis, filiformibus, 3 μ . cr.

Hab. in foliis putrescentibus *Quercus* sp., in silvis pr. Rathenow Germaniæ. — Excipulo valido a ceteris speciebus valde distincta.

9. *Mollisia papillata* Earle, Bull. of the New York Bot. Gard. (1904) 5551 p. 290. — Ascomatibus sparsis, nigris, cupulatis, rugoso-papillatis, 0,5-1 mm. diam., sessilibus, margine conspicue elevato et sicco recurvato, disco ex obscure ardesiaco nigrescente, excipuli cellulis polygoniis, versus marginem elongatis ibique clavato-papillatis 25 \times 5; ascis confertis, cylindraceis, circ. 50 \times 4; paraphysibus filiformibus; sporidiis oblique monostichis vel subdistichis, hyalinis, continuis, cylindraceis, sæpe subcurvulis, 8-10 \times 2.

Hab. in fragmentis ligneis vetustis aeri diu expositis pr. Stanford Univ. California (C. F. BAKER). — *M. melaleucæ* (Fr.) Sacc. affinis sed ascomatibus cupulatis nec patellatis, extus magis distincte rugosis, disco obscuriore diversa.

10. *Mollisia Schumacheri* (Fries) Rehm, Ann. Mycol. V (1907) p. 545, 5552 *Peziza fusca* Schum. non Pers., *Peziza Schumacheri* Fries, Syst. myc. II, p. 98, *Lachnella Schumacheri* Phill. Man. Br. Disc., p. 262, Exs. n. 167, *Trichopeziza fusca* (Schum.) Sacc. — Syll. VIII, p. 414. — Ascomatibus gregariis, sessilibus, plerumque in ligni superficie denigrata, primitus globoso-clausis, diu hemisphaericis, disco plano, purpureo-fusco vel cinereo, crasse marginato, excipulo fusco, scabriusculo, versus marginem cellulis seriatis distantibus, ceterum parenchymatice contexto, 0,5-2 mm. diam.; ascis clavatis, apice rotundatis, 40-45 \times 6-8, 8-sporis, jodo immutatis; sporidiis fusiformibus, rectis vel subcurvatulis, 1-cellularibus, hyalinis, 9-12 \times 2, distichis; paraphysibus filiformibus 2 μ . versus apicem 3 μ . cr., hyalinis, prominentibus.

Hab. ad ligna emortua in Anglia, Dania. — Pili genuini desunt. hinc *Mollisia* species, non *Lachnella* nec *Trichopeziza*.

11. *Mollisia Copelandi* Rehm, Ann. Mycol. V (1907) p. 545. — Ascomatibus in maculis irregulariter orbicularibus, plerumque confluentibus, 1-3 mm. lat., cinereo-niveis vel albis, ex parenchymate tenuissimo epidermidis foliorum formatis sparsis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari, fuscidulo, albido-marginato, plano, 270 μ . diam., excipulo hyalino parenchymatico; ascis clavatis, sessilibus, 40 \times 12, octosporis, jodo immutatis; sporidiis clavatis, utrinque obtusis, sub medio septatis, haud constri-

otis, hyalinis, 12×4 , strato mucoso, tenuissimo obductis, distichis; paraphysibus conglutinis, dilute flavidulis; hypothecio flavidulo.

Hab. in epiphylo folii Caryotæ, Zamboarya District, Mindanao, in ins. Philipp. (E. B. COPELAND). — Ob ascomata in maculis foliorum albis insidentia, species *Tapesiam* in memoriam revocat. Si vero sporidia genuine 1-septata sunt, potius *Nipteræ* species videtur.

12. *Mollisia chionea* Mass. et Crossl. — Syll. XIV, p. 775 — var. 5554
macrospora Boud., Icon. mycol. (1906) n. 192, Hist. et Classif. Discom. Europe p. 138 (1907). — A typo differt sporidiis tantum paulo majoribus.

Hab. in caulibus ? Cyperacearum in Gallia.

13. *Mollisia luctuosa* Boud., Icon. Mycol. t. III, tab. 543 (1907), Hist. 5555
 et Classif. Discomyc. Europe (1907) pag. 138. — Minuta, $0,5-1,5$ mm. lata, tota cinerea, margine pallidiore; cupulis primo urceolatis dein explanatis et undulatis, subtus minutissime puberulis, concoloribus, hymenio et carne saturatioribus; ascis clavatis, octosporis, $55-60 \times 8-9$; paraphysibus cylindræis, intus oleosis aut granulosis, $3-5 \mu$. cr.; sporidiis elongato-fusoideis, sæpius 4-guttulatis, rectis aut curvulis, acutiusculis, $18-20 \times 3-3,5$; pilis externis brevibus, clavatis, 2-3-articulatis, fuscidulis, intus guttulosus, extus granulosis, $30-50 \times 10-15$.

Hab. inter folia putrida Caricis maximæ, Montmorency Gallia.

14. *Mollisia purpurea* Rehm, Ascom. exs. n. 1634, Annales Myc. V 5556
 (1907) p. 80. — Ascomatibus dispersis, sessilibus, primitus globuloso-clausis, dein urceolatis, demum patellaribus, disco orbiculari plano purpureo, margine fusco cincto, excipulo glabro, fusco, parenchymatice contexto, $0,5-1,5$ mm. diam., siccis subcomplicatis, ceraceo-membranaceis; ascis clavatis, apice subacutatis, circ. 70×9 , octosporis, jodo cærulescentibus; sporidiis fusoideis, rectis v. curvulis, 1-cellularibus, plerumque cum guttulis 2 oleosis, hyalinis, $12-14 \times 2,5-3$, distichis; paraphysibus filiformibus 2μ ., versus apicem $3-4 \mu$. cr., guttulis oleosis ochraceis repletis; hymenio dilute olivaceo.

Hab. in medio fasciculi foliorum putridorum Graminis in faucibus « Höllenthal » sub M. Zugspitz alpium Baviaræ (REHM). — A *M. citrinuloide* Rehm disci colore diversa, a *M. puccinioide* (De N.) Sacc. sporidiis diversis, a *Moll. caricinella* Br. disci colore etiam diversa.

15. *Mollisia citrinuloides* Rehm, Ann. Myc. III (1905) p. 226. — Asco- 5557
matibus dispersis, late sessilibus, primitus globoso-clausis, dein di-
sco orbiculari, tenuiter marginato, plano, late aperto, hyalino-fla-
vidulis, demum dilute citrinulis; excipulo parenchymatico, glabro,
versus basim fuscidulo, 0,5-1,5 mm. diam., siccis haud corrugatis,
senilibus nigrescentibus ceraceis; ascis cylindraceo-clavatis, apice
subacutatis, 50-55 \times 6, jodo tinctis, octosporis; sporidiis elongato-
fusoideis, basi acutatis, rectis curvulisve, continuis, hyalinis 10-
12 \times 1,5-2, distichis; paraphysibus filiformibus hyalinis, 2 μ . cr.
Hab. ad culmos putrescentes *Molinia* cæruleæ, Sonntag-
berg Austriæ inf. (P. STRASSER). — Habitu *Pezizella citrinulæ*
æmula sed ascomatibus parenchymaticis, lata basi sessilibus mox
dignoscitur.
16. *Mollisia benesuada* (Tul.) Phill. — Syll. VIII, p. 333. — fm. 5558
Hippophaës Rehm, Ann. Myc. III (1905) p. 393 (nomen nudum).
Hab. in ramis putrescentibus *Hippophaës rhamnoidis*,
prope Warnemünde Mecklenburg Germaniæ.
17. *Mollisia Haglundii* Rehm, (Esterr. bot. Ztschr. LVI (1906) p. 344. 5559
— (Nomen nudum).
Hab. in fragmentis pineis Tunnelschutt prope St. Anton Arl-
berg Austria.
18. *Mollisia Sterei* Rehm, ap. Strasser in Verh. k. k. zool.-bot. Ge- 5560
sell. Wien LVII (1907) p. 325. — (Nomen nudum).
Hab. ad *Corticium jonides* in ramis fagineis siccis Sonn-
tagberg Austriæ inf.
19. *Mollisia culmina* Sacc. — Syll. VIII, p. 336 (*M. cinerea* v. *cul-* 5561
mina). — var. *alpina* Rehm, (Esterr. bot. Zeitschr. LVI (1906)
p. 344. — (Nomen nudum).
Hab. ad gramina et in *Junco Hostii*, Austria.

MOLLISIOPSIS Rehm, Ann. Mycol. VI (1908) p. 315 (Etym. *Mollisia*
et *opsis* aspectus). — A genere *Mollisia* paraphysibus lanceolato-
acutatis, longe prominentibus diversa.

1. *Mollisiopsis subcinerea* Rehm, l. c. p. 315. — Ascomatibus gre- 5562
gariis, sessilibus, primitus globoso-clausis, dein orbiculariter expla-
natis, disco hyalino, tenuiter marginato, 0,3-1 mm. diam., extus
glabris, excipulo parenchymatico, versus basim subfusco, siccis sub-
involutis, disco flavidulo, plerumque albido-marginato; ascis cla-
vatis, apice rotundatis, 45-50 \times 6-7, octosporis, jodo tinctis; spo-
ridiis subclavatis, rectis, 1-cellularibus, hyalinis, 8-9 \times 2, distichis;

paraphysibus lanceolato-acuminatis, medio 4-5 μ . cr., longe prominentibus.

Hab. ad caules siccos *Thalictri*, Lyndonville Amer. bor. (Dr. FAIRMAN). — Modo paraphysibus lanceolato-acutatis a *M. cinerea* et congeneribus discernenda species.

CHLOROSPLENium Karst. Syll. VIII p. 315, X p. 12, XI p. 407, XIV p. 773. XVIII p. 65.

1. *Chlorosplenium lividum* (A. S.) Karst. — Syll. VIII, p. 319 — 5563
Huc ducendum est *Cenangium strobilinum* Sacc., Fungi ital. f. 1306, seu *Ombrophila strobilina* (A. S.) Rehm, Disc. p. 482.

Hab. in strobiliis *Abietis* etiam prope Romam (BAGNIS).

PEZICULA Tul. — Syll. VIII p. 73 et 489, X p. 11, XIV p. 773, XVI p. 730.

1. *Pezicula platensis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5564 (1909) pag. 447, fig. 37. — Sparsa, minuta, sessilis, lenticularis, fusco-lateritia, 1-1,5 mm. diam., subtus turbinata, disco convexula, testacea, ceraceo-rigidula; ascis majusculis tenuissime tunicatis subsaccatis, densissime tenuiterque paraphysatis, octosporis, apice rotundatis, 140-150 \times 30, deorsum subcuneatis breviterque et crasse pedicellatis, jodo immutatis; sporidiis ellipsoideis, dense minuteque guttulatis, distichis, utrinque obtusis, 20 \times 12-14, plus minus inæquilateris, levibus, hyalinis.

Hab. ad rhizomata *Polypodii squamulosi* super caudices vetustos, La Plata, Argentina.

2. *Pezicula majuscula* Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires 5565 (1909) pag. 447. — Turbinata, extus ochroleuca, disco concava, livida, insititia, dein cupulato-expansa, breviter crasseque pedicellata, margine integerrima, 5-15 mm. diam., 5-7 mm. alt.; ascis linearibus, filiformi-paraphysatis, apice obtuse rotundatis, deorsum subangustatis longeque pedicellatis, 250 \times 14, parte sporif. 160 μ . long., octosporis, jodo immutatis; sporidiis ellipsoideis, utrinque obtusulis, recte monostichis, 22-24 \times 12, leniter inæquilateris, 2-guttatis, hyalinis.

Hab. ad ramos dejectos putres, Parque Roca pr. Tucumán Argentina.

PYRENOPEZIZA Fuck. — Syll. VIII p. 354, X p. 17, XI p. 409, XVI p. 732, XVIII p. 71.

1. *Pyrenopeziza millegrana* Boud., Icon. Mycol. t. III, tab. 552 (1907), 5566 Hist. et Classif. Discomyc. Europe (1907) p. 133. — Minutissima, 0,30-0,60 mm. lata, cinereo-albida, extus fuliginosa; ascomatibus urceolatis margine albidō-cinctis, extus fuliginoso-squamulosis, hyemenio pallide cinereo; ascis cylindrico-fusiformibus, ad basim vix attenuatis, octosporis, foramine immarginato, 60-70 × 10-11; paraphysibus tenuibus, ad apicem non incrassatis, pallidis, 3-3,5 μ . cr.; sporidiis fusoideis, intus multi-guttulosis, 22-28 × 4-5, rectis v. leviter curvatis.

Hab. gregaria ad caules putres *Spirææ* *Ulmariæ* in silva Montmorency, Gallia. — A *Pyr. pulveracea* et *Ulmariæ* sporidiis majoribus et multiguttulatis bene distincta.

2. *Pyrenopeziza distinguenda* Starb. — Syll. XVI, p. 733 — var. ni- 5567 *grofoliacea* Rehm, Ascom. exs. n. 1683, Ann. Mycol. V (1907) p. 79. — A typo differt mycelio ad folia obscuriore, ascis octosporis, paraphysibus apice crassioribus, 2-3 μ .

Hab. ad folia putrescentia *Cirsii*, Sonntagsberg Austria inf. (STRASSER).

3. *Pyrenopeziza araucana* Speg., Fungi Chilenses (1910) p. 123. — 5568 Ascomatibus laxè gregariis patellaribus sessilibus, margine involutis, crassiusculis, extus atris glabris, intus pallide carneis, 150-500 μ . diam.; ascis clavulatis modice tenuiterque pedicellatis, 50 × 4, paraphysibus filiformibus apice non incrassatis, obtusis obvallatis; sporidiis pusillis cylindræis non v. vix botuliformibus hyalinis, 5-6 × 1,50-1,75.

Hab. ad ramos emortuos putrescentes *Perseæ* *Lingue* pr. Ciudad de Valdivia Chile Amer. austr.

4. *Pyrenopeziza Galii* Fuck. Symb. mycol. (1869) pag. 295 — Syll. 5569 VIII, pag. 356 — forma *Lycopi* Kunze F. sel. n. 289 (1877) ut var. *Pyr. Gentianæ*, *Pyrenopeziza Lycopi* Rehm, Disc. p. 626 et 605 (icon) (1892). — Ascomatibus 0,5-1,5 mm. long., 1 mm. lat. brunneis, disco griseo, demum hysteroideis; ascis 50-70 × 7-9; sporidiis 8-10 × 3,5-4.

Hab. in caulibus emortuis *Lycopi* europæi, Eisleben Germaniæ (KUNZE).

5. *Pyrenopeziza ligni* (Desm.) Sacc. — Syll. VIII, pag. 366 — var. 5570 *Hippophaës* Rehm, Ann. Myc. v. III (1905) p. 393 (*Cenangium*) [Nomen nudum].

Hab. in ramis emortuis *Hippophaës rhamnoidis*, prope Warnemünde Mecklenburg Germaniæ.

6. *Pyrenopeziza placentiformis* (Niessl) Rehm, Discom. p. 613, *Peziza* 5571
placentiformis Niessl, Verhandl. zool. bot. Gesellsch. Wien (1858)
 p. 331, t. 8, f. 3. — Ascomatibus gregariis, primo innatis, urceolatis, clausis, dein erumpentibus et cupuliformibus, basi lata sessilibus, disco concavo rubenti-flavido v. brunneo, inflexo-marginato præditis, extus brunneis et rugulosis, 0,5-1 mm. diam., ceraceis; ascis clavatis, apice rotundatis, 6-8-sporis; sporidiis ellipsoideis, 1-cellularibus, hyalinis; paraphysibus filiformibus sursum clavulatis.

Hab. in ramulis emortuis *Sambuci nigrae*, Wiltan Tiroliae (v. NIESSL). — Videtur *P. Ebuli* affinis.

7. *Pyrenopeziza patagonica* Speg., Myc. Arg. IV, in An. Mus. Buenos 5572
 Aires (1909) p. 448. — Minuta, sessilis, disco concaviusculo, fusco-atra, orbicularis, 0,5-1 mm. diam., subtus convexula, fusco-olivacea, margine acuto minutissime denseque fimbriatulo, pilis acutis hyalino-fulvellis, 40 × 2,5 ornato; ascis linearibus apice obtuse rotundatis, deorsum leniter tenuatis modice crasseque pedicellatis, 60 × 6-7, octosporis, paraphysibus filiformibus apice sæpe denticulatis; sporidiis suballantoideis utrinque obtusulis, minutis, hyalinis, oblique monostichis non v. minute 2-guttulatis, 9-10 × 3.

Hab. ad ramulos aridos adhuc pendulos *Duvaue* dependentis prope Rio Deseado, Patagonia, Argentina.

8. *Pyrenopeziza ? chilensis* Speg., Fungi Chilenses (1910) p. 123. — 5573
 Ascomatibus laxè gregariis atris coriacellis sessilibus, udis patellari-applanatis, siccis vix corrugato-contractulis, glabris vel obsoletissime pruinuloso-pilosulis, 0,5-2 mm. diam.; ascis subcylindraceis modice pedicellatis, paraphysibus subfiliformibus, sursum lenissime incrassatulis apiceque acutis obvallatis, 50-60 × 6, octosporis; sporidiis mono- v. distichis ellipsoideo-subcylindraceis, pusillis, hyalinis, grosse biguttulatis, 6 × 2,5.

Hab. in ramis emortuis dejectis (*Nothofagi*?), Cerro Caracol de Concepcion, Chile Amer. austr.

9. *Pyrenopeziza Salicis-capreae* Jaap in Abhandl. Bot. Ver. Prov. 5574
 Brandenb. LII (1910) p. 123. — Peritheciis acote gregariis, amphigenis, primum globosis, dein late depressis, intus pallidis extus obscure brunneis, subrugulosis, siccis fere nigris, 0,2-0,3 mm. latis, contextu parenchymatico nigro ad marginem pallidiore; ascis late clavatis, supra angustatis obtusulis incrassatis, 75-100 × 16-20, o-

octosporis; sporidiis irregulariter distichis, ellipsoideis v. elongato-ovoideis, subinæquilateralis, supra rotundatis, basi breviter acutatis, hyalinis, $13-22 \approx 6-8,5$, unilocularibus, quandoque biguttulatis; paraphysibus filiformibus, ramosis, hyalinis, septatis $2-4 \mu$. cr. supra usque ad 6μ . claviformi-incrassatis. J +.

Hab. in foliis vetustis Salicis capreae prope Triglitz in Germania. — Status conidicus adest: *Marsonia salicicola* Bres.

10. *Pyrenopeziza Ellisii* (Rehm) Masee, Journ. of Bot. XXXIV 5575 (1896) pag. 149, t. 357, fig. 6-7; *Peziza denigrata* Ellis N. Am. Fungi n. 565, non J. Kunze, *Niptera Ellisii* Rehm in litt. 1885 ad Ellis — Syll. XI (1895) p. 416 (nomen). — Sparsa v. gregaria, erumpens, primo subglobosa et clausa, dein expansa, tenuis, molliuscula, nigro-grisea, glabra, $0,5-0,7$ mm. diam., excipuli cellulis exterioribus irregulariter polygoniis, $9-12 \mu$. diam., sursum subparallele elongatis et marginem minute fimbriatum reddentibus, atro-brunneis; strato submarginali ex hyphis hyalinis longis conflato et marginulum album formantibus; ascis clavatis apice tenuatis jodoque tinctis, deorsum in pedicellum longum sæpe curvulum tenuatis, $90-100 \approx 10-12$, octosporis; sporidiis biseriatis, cylindraceis, utrinque obtusis, continuis, levibus, sæpe curvulis, 2-guttulatis, $14-16 \approx 3,5-4$; paraphysibus paucis, cylindricis, septatis, 3μ . cr.

Hab. in culmis emortuis Festucae tenellae, Newfield, N. J. et Ammophilae longifoliae, Montana Amer. bor.

TAPESIA (Pers.) Fuck. — Syll. VIII p. 371, X p. 18, XI p. 410, XIV p. 775, XVI p. 734, XVIII p. 72.

1. *Tapesia epiclado-tricha* Sacc., Ann. Mycolog. VI (1908) pag. 565, 5576 tab. XXIV, fig. 5. — Subiculo *Cladotrichi Tapesiae*: hyphis sterilibus repentibus iterato-ramosis, septatis, fuligineis, intertextis, fertilibus ascendentibus $150-200 \approx 4-5$, æque fuligineis, septatis, sursum sæpe leviter crassioribus et obsolete denticulato-sporigeris; conidiis oblongis, 1-septato-constrictis, $8,5 \approx 4-4,5$ fuligineis; ascomatibus subiculo cinctis, plano-scutellatis, pallide cinereis, extus nigris, glabris, $1-3$ mm. diam., contextu dense parenchymatico atro-fuligineo; ascis tereti-clavatis, breve stipitatis, apice obtusulis, $50 \approx 6-7$, octosporis; paraphysibus paucis, filiformibus, ascum non superantibus; sporidiis anguste fusoideis, utrinque acutiusculis, rectis, oblique monostichis, $7-10 \approx 1,5-2$, hyalinis, biguttulatis.

Hab. in lignis putrescentibus (Liriodendri?), Lyndonville

Junio 1908 (FAIRMAN). — *Cladotrichi* subiculum cum *Tapesia* videtur vere connexum.

2. *Tapesia secamenti* Fairm., Ann. Mycol. VIII (1910) p. 329. — Su- 5577
biculo primo radiatim gossypino, dein effuso et dense implicato, ex hyphis simplicibus v. subramosis, continuis, glabris, hyalinis, 3 μ . latis composito; cupulis primitus subglobosis, dein expansis, fuligineo-atris v. fusco-olivaceis, sessilibus; ascis fusoides-cylindraceis, 57 \approx 6-7; paraphysibus indistinctis; sporidiis monostichis, hyalinis, continuis, ellipsoideis v. fusoides, 7-10 \approx 2-3.

Hab. in assulis vetustis dejectis Betulæ in silvis prope Lyndonville N. Y. Amer. bor. — *Tap. byssinæ* affinis.

HYPHODISCUS Kirschst., Verh. Bot. Ver. Brandenb. XLVIII, p. 44 (Etym. *hypha* et *discus* ob ascoma *subiculo* insidens). — Ascomata in subiculo effuso insidentia, ceracea, primum globosa, clausa, demum applanato-discoidea, excipulo brunneo ex cellulis globosis sursum marginem versus filiformibus formato. Asci cylindracei v. clavati, octospori. Sporidia globosa. — Ab analogis gen. *Tapesia* et *Trichobelonio* sporidiis globosis præcipue differt.

1. *Hyphodiscus gregarius* Kirschst., l. c. p. 44, cum icon. — Asco- 5578
matibus gregariis in subiculo effuso primum albo-griseo demum olivaceo insidentibus, disco griseo-flavido, minute pruinoso marginato, 250-500 μ . diam.; excipulo bene evoluto, flavo-brunneo; ascis cylindraceo-clavatis, supra rotundatis, 35-45 \approx 4-5, octosporis; sporidiis mono- v. distichis, globosis, levibus, hyalinis, 2 μ . diam.; paraphysibus filiformibus, continuis, 2 μ . cr.

Hab. in ligno putri Rhamni Frangulæ, in silvis pr. Rathenow Germaniæ.

DESMAZIERELLA Lib. — Syll. VIII p. 386.

1. *Desmazierella follicola* Rick, Broteria V (1906) p. 33. — Ascoma- 5579
tibus applanatis, sessilibus, tenuibus, subhyalinis, ceraceis, extus ad marginem pilis rigidis, raris, 1 mm. longis obsitis, crinibus brunneis, septatis, obtuse apiculatis; ascis 160 μ . long., 10 μ . latis; sporidiis hyalinis, ellipsoideis, uniseriatis, unilocularibus, 12-17 μ . long., 10 μ . latis, membrana granulata; paraphysibus filiformibus, hyalinis, 4 μ . crassis, versus apicem parum incrassatis, discum superantibus.

Hab. in foliis deciduis, Rio Grande do Sul Brasilæ.

Syll. fung. XXII (1-1913)

2. *Desmazierella bulgarioides* Rick, in Ann. Mycol. III (1905) p. 238. 5580

Ascomatibus sessilibus, superficialibus, usque ad 1 cm. latis, valde undulatis, tenacibus, gelatinosis, fuligineo-atris, pilis rigidis brunneis, multiseptatis, nodulosis, apice subrotundatis, $200-300 \times 10$ conspersis, disco marginato, primitus clauso et dilute vinoso, dein aperto et fuligineo-atro, verrucis et setulis rigidis brunneis, multiseptatis, nodulosis, apice subrotundatis 200×10 undique obsito; ascis linearibus vel cylindricis, circ. $120 \times 8-10$, arcte conglutinatis et unitis cum paraphysibus in massam gelatinosam diffusis; sporidiis clavatis vel cylindricis vel etiam subfusiformibus, $12-17 \times 3-4$, unicellularibus, denique spurie septatis, subflavidulis, membrana levi, subinæquilateralibus (immaturis guttulatis et multo majoribus); paraphysibus filiformibus, flaccidis, versus pedem in stratum gelatinosum diffluentibus, versus apicem incrassatis, subviridulis, epithecium non formantibus.

Hab. in trunco putrido, Theewald in Brasilia. — A typo generis satis desciscit.

ERIOPEZIA Sacc. — Syll. VIII p. 381, XVIII p. 73.

1. *Eriopezia albo-lateritia* Rehm in Jaap, Verh. bot. Ver. Prov. 5581 Brandenb. LII (1910) p. 114. — (Nomen nudum).

Hab. in ligno quercino putri prope Triglitz in Brandenburgia. — Cum *Tapesia cruenta* P. Henn. comparanda dicitur.

PIROTTÆA Sacc. — Syll. VIII p. 386, X p. 19, XIV p. 776, XVIII p. 73.

1. *Pirottæa Pini* v. Höhnelt, Fragm. z. Myk., Sitzb. k. Ak. d. Wiss. 5582

Wien, Bd. CXVI, Abt. I (1907) p. 135. — Ascomatibus in parvos greges dispositis, $180-200 \mu$ latis, supra depressis, disco albedo, infra in pedicellum 60×40 conoideo-angustatis, superficialibus, extus brunneis; excupulo tenui setulis rigidis numerosis, nigris, acutis, unilocularibus, usque ad $120 \times 3-5$ tecto; margine ascomatum ciliolato, ciliis 1-2-stratosi, cylindræis, supra rotundatis, brunneis $40 \times 4-5$; paraphysibus sparsis, tenui-filiformibus, hyalinis; ascis clavatis, basi breviter angustato-pedicellatis, 32×6 , octosporis; sporidiis unilocularibus, tenuiter tunicatis, hyalinis, fusoides, utrinque plerumque acutatis, $10-18 \times 1,6-2$. J +.

Hab. in cortice putrescenti *Pini silvestris*, Steinberg Wienerwald Austriæ inf. — *Pir. mimatensi* P. et R. et *P. venturioidi* S. et R. affinis sed distincta.

2. *Pirottæa Bongardii* (Weinm.) Rehm, ap. Jaap in Abh. Bot. Ver. 5588 Prov. Brandenb. IL (1907) pag. 12. — Ita vocanda *Pyrenopeziza Bongardi* (Weinm.) Sacc. — Syll. VIII, p. 358.

LACHNELLULA Karst. — Syll. VIII p. 390, XI p. 411, XVIII p. 76.

1. *Lachnellula calva* Rick, Broteria V (1906) p. 34. — Ascomatibus 5584 gregariis, 1-2 mm. latis, fere sessilibus, pruinosis, subvillosis, primitus calyciformibus, fulvo-ferrugineis, disco lobato-undulato, margine determinato, albo-sericeo; ascis subcylindraceis, breviter pedicellatis, 40-50 \times 5-7, octosporis; sporidiis sphæroideis, unicellularibus, hyalinis 2,5-3 μ . cr., guttulatis, membrana incrassata; paraphysibus linearibus obvallantibus, sæpe furcatis.

Hab. in ligno arborum frondosarum putrido, Rio Grande do Sul Brasiliæ. — Primo intuitu videtur *Dasyscypha* ob naturam indumenti pilorum, sed sporidiis sphæroideis evidenter demonstratur *Lachnellula*.

LACHNELLA Fr. — Syll. VIII p. 391, X p. 19, XI p. 411, XIV p. 777, XVI p. 334, XVIII p. 76.

1. *Lachnella Bresadolæ* Strasser, Verh. zool. bot. Gesellsch. Wien 5585 LVII (1907) p. 334. — Ascomatibus gregariis v. sparsis, sessilibus, primum globoso-clausis dein rotundato-apertis et discum pallide flavidum suburceolatum demumque parum depressum ostendentibus; excipulo rubro-brunneo, pilis incoloribus asperulis 160-200 \times 3-4, obtusis, basi septatis, brunneolis, supra incoloribus dense tecto; ascomatibus udis albo-griseis, siccis olivaceo-griseis et margine convolutis; ascis breviter pedicellatis, cylindraceis, supra depresse rotundatis, basi parum clavato-angustatis, 60-80(100) \times 8-10; sporidiis distichis, cylindraceis, hyalinis. plerumque bilocularibus, nonnullis vero septo fere indistincto, rectis v. curvulis, raro biguttulatis, 12-16 \times 3-3,5; paraphysibus filiformibus, hyalinis, 2-3 μ . cr.

Hab. in fragmentis ligneis siccis Piri Mali, Sonntagberg Austriæ inf. — *Lach. flammeæ* (Alb. et Schw.) affinis.

2. *Lachnella Philadelphi* Rehm, Ann. Mycol. VII (1909) pag. 525, 5586 Ascom. Exsicc. fasc. 45, n. 1855. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, mox urceolatis, dein patellaribus, orbicularibus, 1-3 mm. diam., disco albido, excipulo crasso, parenchymatice contexto, intus hyalino, extus subfusco, pilis simplici-

bus, rectis, versus apicem plerumque acutatis, septatis, crasse asperulis, interioribus fere hyalinis, externis rubeolo-fuscidulis, versus apicem hyalinis, $300 \times 5-7$ obtecto; ascis elongatis, apice rotundatis v. subacutatis, $75-80 \times 8-10$, 4-8-sporis, jodo tinctis; sporidiis clavatis, medio septatis, hyalinis, $10 \times 2-2,5$, distichis; paraphysibus sparsis, rarissime subacutatis et prominentibus, hyalinis, 2-3 p. cr.; hypothecio crystallis oxalato-calcicis prædito.

Hab. ad ramos Philadelphi coronariis, Park Kleinziegenfeld prope Weismain Franconiae sup. (ADE).

3. *Lachnella andina* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires 5587 (1909) p. 449. — Parva, gregaria, subsessilis, extus dense fibrillosa, ferruginea, patellari-applanata, sicca subglobosa, 0,3-1 mm. diam., disco concaviusculo levissimo; ascis subclavulatis, apice rotundatis, sensim longeque pedicellatis, $75-95 \times 8-9$, crasse paraphysatis, jodo fere immutatis; sporidiis inordinate dispositis, botuliformibus, utrinque obtusiusculis, $10 \times 2-2,5$, sæpius valde incurvatis, hyalinis, eguttulatis.

Hab. ad ramulos aridos et decorticatqs Patagonii pinifolii, Puente del Inca pr. Mendoza, Argentina. — *Lachnellæ barbatæ* peraffinis sed certe distincta.

LACHNUM Retz — Syll. XVIII p. 77 (Etym. *lachne* villus) *Dasy-scypha* et *Trichopeziza* Auct. ex p. et Syll. ex p. — Ab his generibus imprimis paraphysibus fuscoideis, apice acutis, plerumque ascos superantibus dignoscendum. — Et certe horum generum plurimæ species huc transferendæ sunt.

1. *Lachnum Astragali* v. Höhn., Ann. Naturhist. Hofmus. Wien XX, 5588 Heft 4 (1905) p. 4. — Ascomatibus plerumque 1-1,5 mm. lat., breviter et tenuiter pedicellatis, siccis globosis, albis et albo-pulveraceo-pilosis, pallide aurantiacis, hemisphaericis, margine incurvatis, extus pilis crassis usque ad 200×4 tectis; ascis clavatis, sessilibus, plerumque $60-90 \times 8$, octosporis; paraphysibus numerosis 4 p. c. crassis, acute lanceolatis, flavo-aurantiaco-guttulatis, ascos long. superantibus; sporidiis mono- v. distichis, hyalinis, unilocularibus, rectis v. curvulis, utrinque attenuatis et obtusis. $10-15 \times 3-4$; Jodi ope poro asc. fortiter cyaneo-colorato.

Hab. in caulibus *Astragali* sp., Erdschias-Dagh, 2300-2900 m. alt. in Asia minore.

2. *Lachnum contractum* Karst., Acta Soc. pro Faun. et Fl. fenn. 5589 XXVII, 4 (1905) p. 6. — Ascomatibus sparsis, sessilibus, plani-

sculis v. concaviusculis, siccitate varie contractis, striguloso-villosis, fuscis, 1-1,5 mm. lat, pilis hyalino-flavescentibus (sub lente), strictis, asperis, haud v. obsolete articulatis, usque ad $100 \times 2-4$; ascis cylindraceo-clavatis; sporidiis distichis, fusoideo-filiformibus v. fusoideo-elongatis, rectis, $8-12 \times 1$; paraphysibus acutatis.

Hab. in caulibus aridis Spirææ prope lacum Baical Sibiriae or. (O. LÖNNBOHM).

3. *Lachnum setigerum* (Phill.) Rehm, Ascom. Amer. bor., Ann. Myc. 5590 v. III (1905) pag. 518. Ita vocanda *Trichopeziza setigera* (Phill.) Sacc. — Syll. VIII, pag. 407. — Ascomate brevissime stipitato, pilis rectis, ad apicem acutis, multoties septatis, flavo-fuscis, c. $300 \times 4-5$, interdum fasciculatim conglomeratis obsesso; ascis cylindraceo-clavatis, apice rotundatis, $90-100 \times 7-8$, octosporis, poro jodo tincto; sporidiis fusiformibus, 1-cellularibus, hyalinis, $15-20 \times 3$, distichis; paraphysibus filiformibus, hyalinis, 2 μ ., versus apicem lanceolato-acutatis, 4 μ . cr., supra ascos prominentibus.

Hab. in caulibus Araliæ, Veratri etc. in America bor.

4. *Lachnum nidulus* Schm. et Kunze — Syll. VIII, p. 408 (*Trichopeziza* 5591) — var. *Eupatorii* Bres. in Strasser, III Nachtr. Pilzfl. Sonntagbg. (Verhandl. zool. bot. Gesell. Wien 1905) p. 612). — Ascomatibus confertis; pilis brunneis septatis superne incrassatis, $80 \times 8-10$; ascis $40-48 \times 4-6$; sporidiis $8-12 \times 1-1,5$.

Hab. in Eupatorio cannabino, Sonntagberg Austria inf. — Var. *Ulmariæ* Jaap, Verh. bot. Ver. Prov. Brandenburg, LII (1910) p. 116. (Nomen nudum). — Ad basim caulium vetustorum Spirææ Ulmariæ prope Triglitz Germania.

5. *Lachnum niveum* (Hedw.) Karst. — Syll. VIII, p. 437 (*Dasyscypha* 5592) — var. *Fairmani* Rehm, Ann. Mycol. VI (1908) p. 316. — Ascomatibus gregariis, sessilibus, elongato-cyathoides, dein distincte tenuiter stipitatis, niveo-albis, primitus clausis, dein disco urceolato, hyalino vel roseolo, 0,3-1 mm. latis, usque ad 1 mm. altis, pilis rectis, simplicibus, septatis, hyalinis, scabris, $50-60 \times 3-4$, versus apicem usque ad 8 μ . latis obtectis; ascis clavatis, $40-45 \times 6-7$, octosporis, jodo tinctis; sporidiis fusiformibus, 1-cellularibus, rectis, hyalinis, 9×2 , distichis; paraphysibus filiformibus, 2-3 μ . cr., subobtusis, prominentibus.

Hab. ad caules emortuos Solidaginis, Lyndonville N. Y., Amer. bor. (E. FAIRMAN). — A typo imprimis indumento breviori dignoscendum.

6. *Lachnum hyalinellum* Rehm — Syll. XI, p. 413 (*Dasyscypha*) — 5593

var. *fructicola* Rehm in Sydow, Ann. Mycol. V (1907) p. 398; Mycoth. germ. n. 611. — Matrice tantum a typo recedere videtur.

Hab. in pericarpis siccis Fagi silvatici, Tamsel Germania.

7. *Lachnum clavicomatum* Kirschst., Verh. Bot. Ver. Brandenburg. 5594 XLVIII (1906) p. 46. — Ascomatibus gregariis, sessilibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., pilis brunneis 120-150 \times 5, supra flavidis et usque ad 9 μ . subclavato-incrassatis, pluries septatis, rectis obsitis; excipulo brunneolo; disco albo-lacteo; ascis cylindraceo-clavatis in pedicellum tenuatis, 50-56 \times 5-6, supra rotundatis, octosporis; sporidiis distichis, subparallelis, hyalinis, cylindraceis v. fusoides, 8-14 \times 1,5-2; paraphysibus lanceolatis, basi 5 μ . cr.

Hab. in ramulis salicinis putrescentibus prope Rathenow Germaniæ.

8. *Lachnum coarctatum* Karst., Acta Soc. pro Faun. et Fl. fenn. 5595 XXVII, 4 (1905) p. 6. — Ascomatibus gregariis, sessilibus, globosis, margine valde contractis, minute apertis, brunneis v. atrofusis, villosulis, circiter 0,8 mm. diam.; pilis flexuosis, vix articulatis, dilute fuliginis (sub microsc.), circ. 2 μ . cr.; ascis cylindraceo-clavatis 70-80 \times 4-5; sporidiis distichis, fusoides-elongatis, rectis, 5-8 \times 1-1,5; paraphysibus parvis, filiformibus.

Hab. in caulibus Urticæ dioicæ prope Kuopio Fennia (O. LÖNNBOHM).

9. *Lachnum calyculiforme* (Schum.) Karst. — Syll. VIII, pag. 454 5596 (*Dasyscypha*) — var. *cyphelliforme* Rehm, Verh. k. k. zool. bot. Gesellsch. Wien LVII (1907) p. 338. — Disco udo albido-flavo, paraphysibus distincte lanceolatis; ascis 48-60 \times 6-7; sporidiis unicellularibus, obtuse fusoides, 8-10 \times 2-3.

Hab. ad corticem Laricis dejectum, Sonntagberg Austriæ inf.

10. *Lachnum olivaceo-sulphureum* Rick, Broteria v. V (1906) p. 34. — 5597 Ascomatibus gregariis, 1-2 mm. latis, breviter stipitatis, extus pilosis, pilis usque ad 100 μ . longis, 5 μ . latis, obtusis, olivaceo-sulphureis, crystalliferis, disco isabellino v. livide melleo; ascis 50 \times 6, octosporis; sporidiis ellipsoideis v. ovalibus, 5-7 \times 3-4, uno apice compressis, uniserialibus, unicellularibus, hyalinis, eguttulatis; paraphysibus linearibus, versus apicem hyalinis, lanceolatis, 3-4 μ . latis.

Hab. in ligno duro arboris frondosæ, Rio Grande do Sul Brasilæ.

11. *Lachnum fusco-floccosum* Rehm, Ann. Mycol. V (1907) p. 520. 5598 — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein

urceolatis, disco subcarneo, excipulo fuscidulo in stipitem brevissimum cylindraceum subglabrum elongato, 0,3 mm. diam., pilis multoties curvatis in infera parte, versus apicem rectis, obtusis, glabris, fuscidulis, creberrimis, ca. 500 \times 4 oblecto, ad marginem pilis modo ca. 90 μ . longis; ascis cylindraceis, 50 \times 4, octosporis; jodo tinctis; sporidiis fusoideo-oblongis, interdum curvatis, hyalinis, demum medio septatis, 8-9 \times 1,5, distichis; paraphysibus lanceolatis, sursum acutatis, longe prominentibus.

Hab. ad ramos, Sumner Washington Amer. bor. (HARPER). —
— *L. calyculiformi* subaffine.

12. *Lachnum distinguendum* Rick, Broteria V (1906) p. 33. — Asco- 5599
matibus 2 mm. latis, disco hyalino, marginato, niveis, crinitis; setulis apice angustatis, crystalliferis, ramosis; stipite 1 mm. alto, albo, pruinato; ascis 50-60 \times 7-10; sporidiis fusoideis, hyalinis, unilocularibus, 10-15 \times 3-4, aliis etiam multo minoribus; paraphysibus sursum lanceolatis, latitudine ascorum, plerumque eguttulatis.

Hab. ad ligna putrida, Rio Grande do Sul Brasiliæ. — Macroscopice valde similis species *Dasyscyphæ distinguendæ*. Sporidiorum differentia speciem hanc cognitu facilem reddit.

13. *Lachnum controversum* (Cooke) Rehm — Syll. VIII, pag. 447 5600
(*Dasyscypha*) — fm. *caricicola* Jaap, Abh. Bot. Ver. Prov. Brandenburg. IL (1907) p. 9. — A typo differt matrice et omnibus partibus magnitudine minore.

Hab. in foliis vetustis Caricis acutiformis, prope Triglitz Brandenburgia.

14. *Lachnum tenue* Kirschst., Verh. Bot. Ver. Brandenburg. XLVIII 5601
(1906) p. 45. — Ascomatibus sparsis, longe et tenue pedunculatis, minutis, albis, primum globosis, dein poculiformibus et discum flavidulum ostendentibus, extus pruinosis et pilis levibus supra obtusis asperulis tectis; ascis cylindraceis, sessilibus, supra rotundatis, 27-30 \times 3, octosporis; sporidiis distichis v. raro oblique monostichis, fusoideis, utrinque rotundatis, 8-12 \times 0,5-1, hyalinis; paraphysibus lanceolatis, acutatis, ascos dimidio superantibus, usque ad 3 μ . cr.

Hab. in foliis emortuis Caricis hirtæ, in silvis prope Rathenow Germaniæ. — Sporidiis angustis a ceteris speciebus distinctum.

15. *Lachnum bambusicola* Rick, Broteria V (1906) p. 33. — Asco- 5602
matibus gregariis, breviter stipitatis, ceraceis, 1 mm. latis, extus albo-villosis, disco, in sicco, subflavescenti; ascis circ. 65 \times 10, apice

subcompressis, octosporis, vix pedicellatis; sporidiis fusiformibus, utrinque acutissimis, $30 \times 2-3$, guttulatis, multiserialibus, hyalinis, unilocularibus; paraphysibus $3-4 \mu$. latis, versus apicem lanceolatis, hyalinis.

Hab. in ramis Bambusæ, Rio Grande do Sul Brasiliæ. — *Erinellæ* habitu et sporarum forma vix dissimile, sed est *Lachnum* genuinum sporidiis continuis et paraphysibus lanceolatis.

16. *Lachnum Enzenspergerianum* P. Henn., Deutsche Süd-polar-Exped. 5608

Bd. VIII (1906) Extr. p. 6, tab. I, fig. 5, a, e. — Ascomatibus ceraceis, sparsis v. subgregariis, stipitatis v. subsessilibus, cupulatis, flavo-carneis, pilosis, c. $250-300 \times 200-230$, margine pilis erectis sicco flexuosis, hyalinis, obtusis, septulatis, subgranulosis, $30-80 \times 4-5$ vestitis, disco concavo, pallido v. subincarnato, ceraceo; stipite brevi, cylindraceo, usque ad 100×100 ; ascis clavatis obtusis, octosporis, $50-65 \times 5-7$; paraphysibus superantibus, lanceolatis, acutis, septatis, hyalinis, $4-5 \mu$. cr.; sporidiis oblique monostichis v. subdistichis, fusoides, acutis v. obtusiusculis, intus minute guttulatis, continuis, hyalinis, $9-12 \times 2-2.5$.

Hab. in foliis Pœ Cookii in insulis Possessionis, Crozet-Gruppe (E. WINKLER).

17. *Lachnum helotioides* Rehm in Syd. Mycoth. march. n. 1479 et 5604

Discom. p. 884 (1893). — Ascomatibus, subsolitariis, sessilibus, pro more brevissime et tenuiter stipitatis, primo globosis, clausis, dein circulari-apertis et discum concavum, tenuiter maginatum ostendentibus, fere æchrois, diaphanis, extus pilis simplicibus, copiosis, obtusis, septatis, glabris, hyalinis, $30-45 \times 3-4$, dense puberulis, siccis albis v. flavidulis, tenuiter ceraceis; ascis clavatis, supra rotundatis, $36-45 \times 5-6$, octosporis, paraphysibus lanceolatis, hyalinis, 5μ . cr. ascos superantibus obvallatis, apice jodo cærulescentibus; sporidiis subcylindricis, obtusis, rectis v. curvulis, continuis, hyalinis, $8-12 \times 2-2.5$, distichis.

Hab. in foliis adhuc stantibus Caricis acutiformis, Grunewald pr. Berlin Germaniæ (SYDOW). — Var. *Ammophilæ* Rehm, Ann. Myc. III (1905) p. 393. — A typo differt sporidiis minoribus 8.5×1.5 . — In foliis putrescentibus *Ammophilæ arenariæ* prope Warnemünde Mecklenburg Germaniæ.

HELOLACHNUM Torrend, Brøteria (1910) p. 53 (Etym. *helos* locus udus et *Lachnum*). — Characteres *Lachni* sed ascoma pilis destitutum.

. *Helolachnum aurantiacum* Torrend, l. c., cum iconc. — Gregarium 5605

breve stipitatum, pulchre aurantiacum, majusculum, 4-10 mm. lat., 4-7 mm. alt.; disco primum concavo et margine circiter 0,5 mm. munito, deinde explanato, extus furfuraceo; stipite 3-5 mm. longo, albescente; ascis clavatis, octosporis, 75-100 \approx 5-7; paraphysibus circ. 16-20 μ . superantibus, sursum lanceolatis, ab basim cuspidis septatis, 100-120 \approx 2,5-4; sporidiis acute fusoides, interdum obtuse ellipsoideis, imo subcuneiformibus, 10-13 \approx 1,5-3, hyalinis, levibus.

Hab. ad radices Ulicis europæi, locis humidis et arenosis prope Tagum, Quinta da Infante, Lusitania. — Habitus quasi *Helotii tubæ*.

TRICHOPEZIZA Fuck. — Syll. VIII p. 401, X p. 20, XI p. 412, XIV p. 777 et 1137, XVI p. 1143, XVIII p. 80.

1. *Trichopeziza Harmandi* Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 153. 5606

— Ascomatibus sparsis, sessilibus, basi attenuatis, superficialibus, primum urceolatis dein scutellatis distincteque marginatis, 0,2-0,3 mm. lat.; disco ceraceo, sordide violaceo; extus pallidius violaceis subpallideque pulverulentis; pilis hyalinis tectis, simplicibus, septatis, levibus, basi fusca longius crassioribus, atque apice parum inflato obtusoque uncinatis, 30-40 \approx 1, basi 12-14 \approx 3-4; ascis clavatis, apice rotundatis, breviter noduloso-stipitatis, 30 \approx 5, octosporis; foramine immarginato; sporidiis elongato-ellipsoideis, simplicibus, hyalinis, biguttulatis, 7 \approx 2,5; paraphysibus filiformibus 3-4-septatis, apice aliquantulum crassioribus, circ. 2 μ . cr., sæpissime basi ramosis.

Hab. in cortice Aceris Pseudoplatani, Docelles Vosges Gallia (Abb. HARMAND). — *Dasyscyphæ hyalotrichæ* Rehm (quæ etiam ad gen. *Trichopezizam* pertinere videtur) affinis, a qua differt colore et forma pilorum nec non statura minore ascorum sporidiorumque.

2. *Trichopeziza marchica* Kirschst., Verh. Botan. Ver. Brandenb. 5607

XLVIII (1906) p. 46. — Ascomatibus in maculis nigricantibus gregariis, sessilibus, pallide brunneis, præcipue ad marginem pilis numerosis, longis, hyalinis obsitis, primum hemisphæricis, dein appplanatis, c. $\frac{1}{4}$ mm. diam.; ascis sessilibus, cylindraceis, supra rotundatis, 34-36 \approx 4-5, octosporis; sporidiis oblique monostichis, hyalinis, ellipsoideis, unilocularibus, bi-raro-triguttulatis, 4-6 \approx 1,5-2; paraphysibus paucis, filiformibus.

Hab. in foliis pineis putrescentibus, in silvis prope Rathenow Germaniæ.

3. *Trichopeziza Galii* Boud., Icon. Mycol. t. III, tab. 536 (1907), Hist. 5608
et Classif. Discomyc. Europe (1907) p. 132. — Minutissima, 0,30-0,50 mm. lata, sessilis, albido-cinerea, urceolata, dein expansa, vix roseola, margine pallidiore; extus ad marginem pilis brevibus, obtusis, albis, septatis et extus granulosus; ascis cylindrico-clavatis, octosporis, 40-50 \times 5-7; paraphysibus tenuiter lanceolatis, albis, rarius filiformibus, intus subgranulosis, 2-3 μ . cr.; sporidiis oblongo-fusoideis, sæpe subclavatis, hyalinis, non guttulatis, 9-10 \times 2-3.

Hab. in caulibus emortuis *Galii Aparines*, Montmorency Gallia. — Inter *Lachnellam* et *Trichopezizam* media.

4. *Trichopeziza valparadisiaca* Speg., Fungi Chilenses (1910) p. 125, 5609
cum icon. — Ascomatibus pusillis dense constipatis, superficialibus, turbinatis, breviter pedicellatis densiuscule villosis, ochroleucis, 150-300 μ . diam., pilis simplicibus non capitatis, levibus 1-3-cellularibus, 50 \times 2-3; ascis subclavulatis breviuscule pedicellatis, 30 \times 4, paraphysibus sursum vix incrassatis obtusis, non longioribus cinctis; sporidiis pusillis ellipsoideis hyalinis minutis biguttulatis, 4 \times 1,5, unilocularibus.

Hab. ad folia emortua *Puyæ chilensis*, Cerro Alegre de Valparaiso Chile Amer. austr.

5. *Trichopeziza velutina* (St. Amand) Sacc. et Trott., *Peziza velutina* 5610
St. Amand Fl. agenaise, Agen, 1821, p. 531. — Minutissima; ascomatibus subsessilibus, primo globulosis, dein oblongatis v. difformibus, flavidis, piloso-velutinis, senio nigricantibus, plerumque dense aggregatis.

Hab. inter muscos et hepaticas ad cortices arborum in agro Agen Gallia. — Verisimiliter affinis *Tr. sulphureæ*, *Tr. leucophææ* etc.

UNGUICULARIA v. Höhn., Ann. Mycol. (1905) p. 404 (Etym. *unguicula* ob pilorum formam). — Ascomata parva, superficialiter insidentia, basi angustata extus pilosa, pilis crasse tunicatis; contextu minute parenchymatico-fibroso; asci clavati, octospori; sporidia 2- vel 3-sticha, unilocularia, elongata; paraphyses tenues. — A *Pezizella* et *Dasyscypha* differt præcipue pilis crassissime tunicatis, acuminatis. Cfr. quoque v. Höhn. in Sitzungsab. K. Akad. Wiss. Wien, CXV (1906) p. 93 (gen. *Unguiculella* v. Höhn.).

1. *Unguicularia unguiculata* v. Höhn., l. c. cum icon. — Ascomati- 5611
bus sessilibus, albo-carneis, primum globoso-clausis dein discoideo-apertis, albis v. pallidis, 200-400 μ . diam., pilis plerumque irregu-

lariter incurvatis, hyalinis, $40-60 \approx 7-9$; ascis tenuiter tunicatis, acute clavatis, octosporis, $40-60 \approx 6-7$; paraphysibus numerosis, $\frac{1}{2}$ μ . cr., filiformibus; sporidiis distichis, unilocularibus, hyalinis, fusoidis, utrinque acutatis, $9-12 \approx 2-3$; J +.

Hab. in foliis abietinis dejectis putrescentibus prope Untertullnerbach Wiener Wald Austriæ.

2. *Unguicularia hedericola* Rehm, in Strasser, Verh. k. k. z. bot. Ges. 5612

Wien LX (1910) p. 469. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculari, 0,1-0,15 mm. diam., hyalino-fuscidulo, excipulo-flavescente, versus marginem prosenchymatice contextis, hyphis marginalibus cellulis conoideis, demum tenuiter hamulato-reflexis, scabris, 15-18 μ . long. ad basim 5 μ . latis coronatis, siccis contractis: ascis clavatis, apice rotundatis, $40-45 \approx 7-8$, octosporis, jodo immutatis; sporidiis obliquis, unicellularibus, biguttatis, hyalinis, $5-8 \approx 3,5-4$, plerumque monostichis; paraphysibus filiformibus, hyalinis, ad apicem 1,5-2 μ . cr.

Hab. in ramulo *Hederæ Helicis* decorticato, Hollenstein Austria inf.

3. *Unguicularia falcipila* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXV, 5613

Abt. I (1906) p. 654. — Ascomatibus superficialibus late insidentibus, applanatis, tenuibus, solitariis v. gregariis, pallide carneis, 100-240 μ . diam., extus pilis hyalinis, unicellularibus, 20-24 μ . long., basi 3-4 μ . lat. fortiter hamatis vestitis; ascis late insidentibus, clavatis, obtusis, tenue tunicatis, tunica supra usque ad 2 μ . cr., octosporis; sporidiis distichis, hyalinis, unilocularibus, elongatis, subcylindraceis, rectis v. vix incurvatis, minute uni- v. biguttulatis, utrinque rotundatis, $5,5-7 \approx 1,5-2$; paraphysibus paucis filiformibus; J-.

Hab. in caulibus putrescentibus *Urticæ dioicæ*, Wiesenbachtal Austriæ inf.

4. *Unguicularia limosa* Rehm in Jaap, Abh. Bot. Ver. Prov. Brandenburg. LII (1910) p. 118. — (Nomen nudum).

Hab. in caulibus putrescentibus *Equiseti limosi* prope Triglitz in Germania.

DASYSCYPHA (Fr.) Fuck. — Syll. VIII p. 432, X p. 21, XI p. 412, XIV p. 779, XVI p. 735, XVIII p. 81.

1. *Dasyscypha Rosæ* Jaap, Verh. Bot. Ver. Prov. Brand., L (1908) 5615 p. 31. — Ascomatibus minutis, gregariis, plerumque hypophyllis, sessilibus, primum globoso-clausis, dein circulariter apertis et discum

pallidum ostendentibus, margine incurvato, flavis et pilis flavidis 2,5-3,5 μ . cr., basi septatis et 100-200 μ . long. præditis; siccis fere globosis et flavo-brunneis, subverrucoso-rugosis, tenui-ceraceis; ascis elongato-clavatis, supra obtuse acutatis, 25-32 \times 5-6, octosporis; sporidiis elongatis v. subclavatis, 5-8 \times 1,5, rectis, unilocularibus, sæpe biguttulatis, hyalinis, oblique distichis; paraphysibus filiformibus, obtusis, 2 μ . cr.; J +.

Hab. in foliis vetustis Rosæ centifoliæ prope Triglitz in Brandenburgia Germaniæ.

2. *Dasyscypha campylotrichia* A. L. Sm., Trans. Brit. Mycol. Soc. 5616 (1908) v. III (1909) p. 112, tab. VI, fig. 3. — Ascomatibus minutis, 150-200 μ . circ. diam., sparsis v. subgregariis, primum clausis, siccis flavo-citrinis, udis apertis et discum parum ostendentibus, extus et præcipue ad marginem pilosis, pilis sursum subulatis, subincurvatis 30-45 \times 4 præditis; ascis clavatis breviter stipitatis, circ. 35 \times 8; sporidiis parvis, ellipsoideis, hyalinis, 5 \times 2.

Hab. in caulibus Cardui spec, Scone Perthshire Britannia (MENZIES).

3. *Dasyscypha pulverulenta* (Lib.) Sacc. — Syll. VIII, pag. 462. — 5617 var. *conicola* Rehm in Sydow, Ann. Mycol. (1910) p. 492, Myc. Germ. n. 907. — A typo differt pilis non resiniferis.

Hab. ad squamas conorum Pini, Triglitz? in Germania. — Probabiliter eadem est var. *conorum* Rehm in Jaap, Verhandl. bot. Ver. Brandenb. LII (1910) p. 115. — Var. *purpurascens* Rehm, Ascom. Exsicc. fasc 46, n. 1877, Ann. Mycol. (1910) p. 298. — A typo differt pilis rectis, asperis, hyalinis, 60 \times 4, contentu crystalloideo-resinoso rubro-brunneo purpurascenti. — In foliis putrescentibus Pini silvestris, Triglitz in Priegnitz Germaniæ.

4. *Dasyscypha fusco-sanguinea* Rehm — Syll. VIII, p. 459 — var. 5618 *aurantiaca* v. Höhnelt ap. Rehm, Ann. Mycol. III (1905) p. 230. — Disco vitellino v. aurantiaco a typo dignoscenda.

Hab. in cortice Pini montanæ, Rudolfshütte in Stubachthal, Salzburg (v. HÖHNEL).

5. *Dasyscypha Körberii* (Peyl) Sacc. et Trav., *Peziza Körberii* Peyl, 5619 Besch. einzig. neuer Pilze in Lotos VIII (1858) p. 31, t. I, f. 20. — Ascomatibus sparsis, in stipitem brevissimum tenuatis, minutissimis, madore tantum apertis, trochiformi-globosis, extus setulis rigidulis, nitide albis, crystallinis, apice rotundatis dense vestitis; disco concavo albo; ascis tereti-clavatis, paraphysatis, in stipitem

longiusculum tenuatis, apice rotundatis, octosporis; sporidiis oblique monostichis, ellipsoideis, hyalinis.

Hab. in foliis *Fimbristylis gracilis* in calidariis in Boemia. — Affinis *Dasyscyphæ niveæ*.

6. *Dasyscypha subbadiella* Rehm, Ann. Mycol. V (1907) p. 534. — 5620
Ascomatibus gregariis, sessilibus, subobconicis, clausis, demum patellaribus, badio-hirtellis, 0,15 mm., excipulo parenchymatico fusco, pilis simplicibus, rectis, obtusis, glabris, septatis, fuscis, ad apicem dilutioribus, 120 \times 5-6 obsessio; ascis clavatis, apice rotundatis, 35-40 \times 6, octosporis, jodo tinctis; sporidiis fusiformibus, rectis v. curvatis, 1-cellularibus, utrinque 1-guttulatis, hyalinis, 10 \times 2, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad folia sicca putrescentia *Caricis ampullacæ*, Sayser Alpe, Graubünden, Helvetiæ (Dr. VOLKART). — Vix visibilis; a *Lachno badiello* imprimis paraphysium forma diversa.

7. *Dasyscypha perplexa* Boud., Icon. Mycol. t. III, tab. 542 (1907), 5621
Hist. et Classif. Discomyc. Europe (1907) p. 120. — Minuta, 0,60-1 mm. lata, alba, hymenio pallide lutescente; ascis clavatis, minutis, foramine immarginato, 40-45 \times 6-7; paraphysibus elongatis, fusoido-acutis, ad basim septatis, albis, intus minute granulosis, 70-75 \times 4; sporidiis oblongo-fusoideis, intus non aut rarius granulosis, 10-12 \times 2-3.

Hab. ad folia emortua *Caricis maximæ*, Montmorency, Gallia. — Habitu *Erinellæ juncicolæ* sed sporidiis non filiformibus distincta.

8. *Dasyscypha caricicola* (Lasch) Sacc. et Trott., *Peziza caricicola* 5622
Lasch in Klotzsch Herb. viv. Mycol. n. 1531. — Breviter stipitata, hemisphærica, albo-villosa, disco aureo.

Hab. in *Caricis* sp. in Germania. — An *Dasyscypha Caricis*?

9. *Dasyscypha Typhæ* Jaap, Verh. bot. Ver. Prov. Brandenb., LII 5623
(1910) p. 115. — (Nomen nudum).

Hab. in foliis vetustis putrescentibus *Typhæ angustifoliæ*, prope Triglitz in Brandenburgia.

10. *Dasyscypha Winteriana* Rehm, Discom. in Krypt. Fl. III, p. 840 5624
et 826 (icon.). — Ascomatibus gregariis, sessilibus, calyciformibus, primo clausis, ovoideis vel in stipitem brevem tenuatis, dein circulariter hiascentibus et discum concavum, hyalinum ostendentibus, diaphanis, albo-flavidulis, extus flavido-rubellis et pilis laxiusculis, curvulis, septatis, hyalinis, brevibus, 3 μ . cr. conspersis, siccis contortis v. flexis, 250-300 μ . diam., ceraceis; ascis clavatis late

sessilibus, apice obtusule acutatis, 40-50 \times 7-8, octosporis; sporidiis fusoidis, subrectis, 1-cellularibus, utrinque 1-guttulatis, demum diblastis, 12-15 \times 2, distichis; paraphysibus filiformibus, 1,5 μ . cr.

Hab. in petiolis putrescentibus *Asplenii Filicis-feminae* pr. Königstein a. E. Saxoniae (KRIEGER). — Var. *tetraspora* Rehm, l. c. p. 841. — Ascis tetrasporis; sporidiis 15-18 \times 2-3,5, continuis. — In eadem matrice, Rigi Helvetiae (WINTER).

11. *Dasyscypha flavidula* Rehm, Ann. Mycol. VII (1909) p. 542. — 5625

Ascomatibus in rimis stipitis arcte congregatis; sessilibus, tenuissime stipitatis, cyathoidis, pseudoparenchymatice contextis, pilis sparsis, septatis, subcurvatis, obtusis, scabris, hyalinis v. dilute flavidulis, c. 50 \times 4 obsessis, c. 250 μ . diam., stip. 100 μ . lato, 0,3 mm. alto, albo-flavidulis, siccis aureis; ascis clavatis, apice rotundatis, 40-45 \times 4-5, octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, rectis, 1-cellularibus, hyalinis, 6-7 \times 1,5-2, 1-2-stichis; paraphysibus filiformibus, 2,5 μ . cr., hyalinis.

Hab. ad stipites *Filicis?* Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — *D. Pteridis* colore et structura valde distincta.

12. *Dasyscypha abscondita* Massee, Kew Bull. n. 46 (1906) pag. 46, 5626

fig. 1-6. — Ascomatibus 1,5-2 mm. alt., 1 mm. lat. gregariis, primo globosis dein cupulatis, stipitatis, extus margineque pilosis, albidis; pilis hyalinis, septatis, clavatis, 60-80 \times 7-10; ascis cylindraceis, octosporis, 50 \times 6-7; sporidiis hyalinis, ellipsoideis, 5 \times 2; paraphysibus filiformibus.

Hab. gregaria in Horto bot. Kew Angliæ (G. NICHOLSON).

13. *Dasyscypha inconspicua* P. Henn., Verh. Bot. Ver. Prov. Bran- 5627

dbg. L (1908) p. 134. — Ascomatibus foliicolis subsessilibus, minutis, subglobosis, albidis, pilis hyalinis vix septatis, 60-140 \times 4-5, erectis vestitis, disco albo, levi, c. 150 μ . diam.; ascis clavatis, obtusis, octosporis, 22-30 \times 4-4,5; paraphysibus filiformibus, hyalinis, c. 1-1,5 μ . cr.; sporidiis subdistichis, oblongis, rectis v. curvulis, obtusiusculis, hyalinis, 5-6 \times 1,5-2.

Hab. ad folia putrida prope Tamsel, Germania (VOGEL). — Ob staturam et indumentum pilorum distincta.

14. *Dasyscypha Fairmani* Rehm, Ann. Mycol. VII (1909) p. 535. — 5628

Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein urceolatis, demum explanatis, disco orbiculari, dilute carneo, 1-2 mm. diam., ceraceis, excipulo pilis longissimis, simplicibus, vario modo curvatis, obtusis, septatis, glabris, fuscidulis, versus apicem hya-

linis, perlongis, 4 μ . cr. vestito, siccis urceolatis, disco flavidulo; ascis clavatis, apice rotundatis, 50-60 \approx 7-8, J-, 8-sporis; sporidiis oblongo-cylindræis, utrinque obtusis, unicellularibus, utroque apice parviguttulatis, hyalinis, 12-14 \approx 3, distichis; paraphysibus filiformibus, 2 μ . crassis.

Hab. ad lignum putridum in silvis, Lyndonville, New York Amer. bor. (E. FAIRMAN). — *Das. albo-luteæ* proxima sed sporidiis majoribus distincta.

15. *Dasyscypha atropila* Boud., Icon. Mycol. t. III, pl. 505 (1907), 5629 Hist. et Classif. Discomyc. Europe (1907) p. 121. — Minuta 0,5-1 mm. lata et alta, pedunculata, ochracea, pilis elongatis nigris et septatis dense vestita; ascis clavatis, octosporis, 55-60 μ . long.; paraphysibus acutis, ascos paulo tantum superantibus, hyalinis, 4-5 μ . cr.; sporidiis oblongo-fusoideis, albis, intus non granulosis, 12-14 \approx 2,5-3; pilis septatis, acutiusculis, sub lente composita brunneis, 140-300 \approx 5-7.

Hab. in ramulis putrescentibus *Aceris* (?), Jura, Gallia. — *A. D. relicina* Fr. ascomatibus minoribus distincte stipitatis et pilis atris distincta.

16. *Dasyscypha citricolor* (B. et Br.) Massee — Syll. XVIII, p. 85 5630 — Huc ducenda est *Trichopeziza vitricolor* (B. et Br.) Sacc. (ex errore pro *citricolor*) — Syll. VIII, p. 411.

Sect. 2. Phæosporæ.

ALEURINA Sacc. — Syll. VIII, p. 472, XVI p. 738, XVIII p. 88.

1. *Aleurina subapiculata* von Höhnelt, Stzb. k. Ak. d. Wiss. Wien, 5631 CXVIII, Abt. I (1909) p. 397. — Ascomatibus gregariis, patelloideis, late adnatis, margine incurvato revoluta, 5-7 mm. latis, 400-450 μ . cr., e brunneo-olivaceo nigricantibus, extus glabris, rugulosis; excipulo grosse parenchymatico 200 μ . cr.; ascis cylindræis, octosporis, 270 \approx 12; paraphysibus filiformibus, 1,5-2 μ . cr., supra clavatis et 6-9 μ . latis, brunneolis; sporidiis monostichis, ellipsoideis, utrinque subangustatis, apice acutatis v. apiculo hyalino usque ad 2 μ . longo præditis, pallide brunneolis, biguttulatis, minute granuloso-rugulosis, 18-22 \approx 8-9,5.

Hab. in latere interiore corticis putrescentis, Tjibodas in ins. Java. — *A. ochraceæ* (Mass. et Rod.) et præcipue *Aleur. apiculatæ* (Cooke) affinis.

2. *Aleurina Readeri* Rehm, Ann. Mycol. VI (1908) p. 324. — Asco- 5682
matibus sparsis vel aggregatis, primitus subturbatis, dein patel-
laribus, planis, tenuissime marginatis, demum disco orbiculari con-
vexulo, medio umbonato, 7-10 mm. diam., extus glabris, itemque
stipite crasso, cylindraceo, 5-7 mm. longo, 3-4 mm. crasso, versus
basim subincrassato, sordide albidulis vel albido-ochraceis, carno-
sis; ascis cylindraceis, apice rotundatis, haud incrassatis, 150 × 9-
10, octosporis jodo immutatis; sporidiis oblongo-ellipsoideis, 1-cel-
lularibus, haud guttatis, primitus hyalinis, demum fuscidulis, gla-
bris, 12-14 × 6, monostichis; paraphysibus filiformibus, septatis,
intus granulatis, hyalinis, 2 µ. crassis usque ad apicem.

Hab. ad terram?, Co. of Folett, Victoria Australiæ (F. M.
READER). — *Aleurince substipitatae* et *A. olivaceae* subaffinis.

Sect. 3. Hyalodidymæ. —

HELOTIELLA Sacc. — Syll. VIII p. 474, XI p. 415, XIV p. 782,
XVI p. 740, XVIII p. 93.

1. *Helotiella Maireana* Rehm, Ann. Mycol. IV (1906) p. 440. — A- 5683
scomatibus gregariis, sessilibus, subcyathoides, primitus globoso-
clausis, dein disco orbiculari plano, tenuissime marginato, 0,15-
0,25 mm. lat., extus glabris, in stipitem brevissimum crassum elon-
gatis, 0,2 mm. alt., hyalino-citrinulis, siccis distinctius stipitatis,
excipulo ceraceo pseudoparenchymatico hyalino; ascis cylindraceo-
clavatis, apice rotundatis incrassatisque, 60-70 × 5-6, octosporis,
poro jodo tincto; sporidiis oblongis, utrinque subattenuato-rotun-
datis, medio crasse septatis, haud constrictis, utrinque juxta se-
ptum 1-guttulatis, hyalinis, 7-8 × 2,5, oblique 1-stichis (interdum
in apice asci 2-stichis); paraphysibus filiformibus, hyalinis, 3 µ.
crassis.

Hab. in cupulis dejectis *Quercus cocciferæ* prope Olym-
pium Elidis Græciæ (R. MAIRE). — Hinc *Helotio herbarum* illinc
Phialeæ subpallidæ et *Ph. alniellæ* affinis, sed sporidia crasse 1-
septata.

2. *Helotiella Bubákii* Rehm, Ascom. exs. n. 1679, Ann. Mycol. V 5684
(1907) pag. 78. — Ascomatibus caespitosis, plerumque 2-20 arcte
congregatis, rarius solitariis, per epidermidem prorumpentibus,
dein fere sessilibus, cyathoides, primitus globoso-clausis, mox di-
sco orbiculari tenuiter marginato explanato, demum subimmargi-

nato et complicato, dilute albido-flavidulis, siccis flavescentibus, in stipitem brevissimum elongatis, 0,2-0,5 mm. diam., excipulo prosenchymatice contexto, hyalino; ascis clavatis, apice rotundatis et subincrassatis, 90-100 \times 8-9, jodo tinctis; sporidiis fusoideis plerumque rectis, medio septatis, utraque cellula guttis oleosis magnis 2 repleta, demum 3-septatis, hyalinis, 12-15 \times 4-5, distichis; paraphysibus filiformibus, 2 μ ., versus apicem 3 μ . cr., hyalinis.

Hab. in silvis umbrosis ad flumen Luznica in ramis emortuis Salicis fragilis (BUBAK). — Ob sporidia demum (genuine?) 3-septata ad *Belonium* vertit.

3. *Helotiella Rehmii* (Strasser) Sacc. et Trott., *Helotium Rehmii* Strasser, Verh. k. k. zool. bot. Gesellsch. Wien LVII (1907) p. 332, *Helotium lutescens* Rehm, Ascom. exsicc. n. 1719 b. — Ascomatibus plerumque gregariis, raro ad corticem putrem insidentibus, sæpe sub cortice orientibus vel intra rimas corticales nidulantibus, primum subturbinatis et demum depresso-discoideis, tenui-ceraceis, glabris, stipite et disco flavo-citrino, siccis flavo-auratis; disco ad marginem acie tenui flavido-viridi, 1-2 mm. lat., stipite quandoque usque ad 1 mm. long.; ascis elongatissime clavatis, apice rotundatis, 140-160 \times 12-13; sporidiis supra distichis infra monostichis, ellipsoideis vel obtuse fusoideis, hyalinis, uniseptatis, quandoque triseptatis, ad septa constrictis, plerumque 18-23 \times 6-8; paraphysibus ramosis, apice flavidis, 2 μ . cr., apice crassiusculis, 2,5-3 μ . J +.

Hab. ad cortices abietinos putres, Sonntagberg Austriae inferioris.

4. *Helotiella discula* (Ferdinands. et Winge) Sacc. et Trott., *Helotium discula* Ferd. et Winge, Botanisk Tidsskrift XXX (1910) p. 211, fig. 1. — Ascomatibus gregariis, sessilibus, juvenilibus cupulatis, maturis discoideo-explanatis, disco subconvexo, carnosulis, ad 750 μ . diam., flavidis v. (in sicco) succineis, extus glabris; ascis cylindraceo-clavatis, sessilibus, 43-56 \times 4,75-6,50, sporidia nonnunquam 8, sæpius, - nonnullis frustratis - pauciora foveantibus; sporidiis oblique monostichis, fusiformibus, utrinque acutiuscule rotundatis, primo bi-guttulatis, ad maturitatem medio 1-septatis, non constrictis, 10,5-14 \times 2,5-3,7 hyalinis; paraphysibus filiformibus, non septatis, 1 μ . circ. cr., hyalinis, superne in clavulam usque ad 5 μ . cr., substantia oleosa, flavida repletam subito dilatatis, ascos parum superantibus; membrana tota ascorum nec non paraphysibus jodi ope intense cærulescentibus.

Hab. ad lignum subputridum decorticatum prope Las Trincheras Venezuelæ (H. LASSEN).

5. *Helotiella Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. VIII 5637 (1906) Extr. pag. 7, tab. I, fig. 7, *a, e*. — Ascomatibus ceraceis, sessilibus, sparsis v. gregariis, primo subgloboso-clausis, dein cupulatis, extus subviolaceo-brunneolis, marginatis, circ. 300-380 μ . diam., disco concavo v. subplano, fusco-brunneo dein pallescenti, levi; ascis cylindraceo-clavatis, obtusis, octosporis, 45-60 \times 6-10; paraphysibus filiformibus, ramosis, hyalinis, 1,5-2 μ . cr.; sporidiis fusoideis, subacutis, rectis, medio septatis, haud constrictis, hyalinis, eguttulatis, 10-12 \times 4.

Hab. in foliis Poæ Cookii, in ins. Possessionis, Crozet-Gruppe (E. WERTH).

6. *Helotiella Drygalskiana* P. Henn., Deutsche Südpolar-Exped. Bd. VIII (1906) Extr. p. 6, tab. I, fig. 6, *a, e*. — Ascomatibus ceraceis, sparsis v. subgregariis, sessilibus, primo subglobosis, clausis, dein cupulatis, violaceo-brunneis, subradiato-striatulis, c. 300-380 μ . diam., disco pallido, concavo; ascis cylindraceo-clavatis, obtusis, 8-sporis, c. 30-35 \times 3-4; paraphysibus lanceolatis, superantibus, acutis, c. 40 \times 4; sporidiis oblique monostichis v. subdistichis, rectis v. curvulis, ellipsoideis v. fusoideis, medio 1-septatis, hyalinis, 7-8 \times 3-3,5.

Hab. in foliis Poæ Cookii, in ins. Possessionis, Crozet-Gruppe (E. WERTH).

7. *Helotiella nerviseda* Rehm, in Strasser Verh. k. k. zool.-bot. Gesellsch. Wien LVII (1907) p. 333. — Ascomatibus epiphyllis et plerumque ad nervos foliorum putrescentium sparse insidentibus, primum cylindraceo-clausis dein calyciformi-apertis demum tenuiter et depresso marginatis, 0,2-0,5 mm. lat., basi in pedicellum cylindraceum curvulum 1 mm. long. circ. 0,2 mm. cr. attenuatis, e pallide flavis stramineis, excipulo glabro prosenchymatico; ascis clavatis, supra rotundatis, octosporis, 100 \times 10, J+; sporidiis ellipsoideis, obtusiusculis, rectis, subinæqualibus, bilocularibus, ad septum vix constrictis, hyalinis, 15 \times 5, distichis; paraphysibus filiformibus, 2 μ . crassis, supra usque ad 4 μ ., hyalinis.

Hab. ad folia putrescentia, Sonntagberg Austriæ inf.

PSOROTHECIOPSIS Rehm — Syll. XVI p. 746, XVIII p. 98.

1. *Psorotheciopsis decipiens* Rehm — Syll. XVI, p. 746 — var. bi- 5640
spora Rehm, Hedwigia XLVII (1905) p. 11, fig. 9. — Ascis pi-

riformibus, sessilibus, versus apicem elongatis, $80 \approx 40$, bisporis; sporidiis demum $50-60 \approx 25-30$.

Hab. ad folium Guatteriae australis, Blumenau Amer. austr. (ULE).

NIPTERA Fr. em. Sacc. — Syll. VIII p. 480, X p. 24, XI p. 416, XIV p. 784, XVI p. 471, XVIII p. 94.

1. *Niptera Lychnidis* (Fuck.) Lind, Vidensk.-Selskab. Skrif. Math. 5641 Naturw. Kl., Christiania (1909) n. 9, Extr. pag. 13, *Micropeziza Lychnidis* Fuckel, Oudemans, Fl. mycol. Nowaja Semlja (1885) tab. II, fig. 10. — Ascis ellipsoideis utrinque attenuatis, breve stipitatis, tenue tunicatis, curvulis, 8-sporis, $60 \approx 12$; paraphysibus numerosis; sporidiis ellipsoideis, falcatis, hyalinis, inæqualiter bipartitis, $18-22 \approx 4-5$.

Hab. in foliis emortuis Melandrii apetali fm. arcticæ, King William Land Americæ Arcticæ.

2. *Niptera Gaduæ* P. Henn., Hedwigia XLVII (1908) pag. 270. — 5642 Ascomatibus sparsis superficialibus, sessilibus, cupulato-patellatis, ceraceis, marginatis, ca. 300 μ . diam., extus subpallidis, disco incarnatis; ascis subclavatis apice rotundato-obtusis, 8-sporis, $40-50 \approx 3,5-5$, paraphysibus filiformibus hyalinis, $1-1,5 \mu$. crassis, apice clavatis, c. 2 μ . incrassatis; sporidiis oblique monostichis v. subdistichis, ellipsoideis, 1-septatis, haud constrictis, $6-11 \approx 2,5 \approx 3$.

Hab. in ramulis Gaduæ? sp. in societate *Balansie regularis* Möll., Amazonas, Juruá-Miry.

3. *Niptera chilensis* Speg., Fungi Chilenses (1910) p. 126, cum icon. 5643 — Ascomatibus hinc inde pauci-gregariis constipatis, udis patellaribus, siccis contracto-difformibus, minutis, extus fusco-ferrugineis, coriaceis, intus melleis, subceraceis, 0,5-1,5 mm. diam.; ascis clavulatis sursum subacutiusculis, deorsum longiuscule attenuato-pedunculatis, 90-100, p. sp. $60-70 \approx 7-9$, paraphysibus filiformibus vix longioribus apice 2-3 μ . subincrassatulis et acutiusculis obvallatis; sporidiis monostichis e fuscoideo subbotuliformibus medio 1-septatis, non constrictis, hyalinis, parvis, $11-14 \approx 3$.

Hab. in ramis erosis plantæ ignotæ (? *Ætotoxici*), Cerro Caracol de Concepcion, Chile Amer. austr.

4. *Niptera Mülleri-Argoviensis* Rehm, Ann. Mycol. IV (1906) p. 340 5644 et VI (1908) p. 324. — Ascomatibus gregariis, in maculis dilute denigratis sessilibus, hypophyllis, primitus globoso-clausis, dein disco urceolato hyalino, fimbriato-marginato, extus fusco-nigris, a-

sperellis, siccis imprimis corrugatis et involutis, excipulo parenchymatico e cellulis fuscis subrotundis usque ad 15 μ . contexto, versus marginem seriebus hypharum simplicibus, interdum subramosis, septatis 4-5 μ . crassis, cellula apicali obtusa clavata 10-20 \times 5-8 coronatis, subfuscis, ceraceis, 300-350 μ . diam.; ascis clavatis, apice rotundatis, sessilibus, 35-40 \times 5-7, octosporis, poro jodo tincto; sporidiis cylindraceis, rectis, medio septatis, haud constrictis, hyalinis, 10 \times 1,5, distichis; paraphysibus filiformibus, septatis, 1,5 μ ., versus apicem 2,5 μ . crassis, hyalinis.

Hab. ad folia Quercus Ilicis, Cavalaire Galliae australis (MÜLLER-ARGOV. in Herb. BARBEY-BOISSIER).

5. *Niptera ramincola* Rehm, in Feltg. Vorst. Pilz.-Fl. Luxemb. IV 5645 (1905) p. 27, *N. ramealis* Karst. sec. Rehm olim. — *A. N. rameali* sec. Feltgen, loc. cit. differt sporidiis utrinque obtusis, 9-15 \times 2-3.

Hab. in igno fagineo, in ramis Daphnes Mezerei et Symphoricarpi, Luxemburgia.

6. *Niptera caricicola* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5646 (1909) pag. 449. — Pusilla, superficialis, laxe gregaria, atra, glabra, amphigena, latiuscule matrici adnata, plano-concaviuscula, 200-350 μ . diam., margine integra, contextu fulvello indistincto; ascis subfusoides utrinque leniter tenuatis, apice subrotundatis, 80 \times 10, crassiuscule breviter pedicellatis, octosporis, obturaculo jodi ope caerulescente; paraphysibus filiformibus sursum non incrassatis; sporidiis elongato-ellipsoideis, oblique distichis, utrinque acutiusculis, 14-15 \times 3,5-4, rectis, primo continuis dein diblastis, non constrictis, hyalinis.

Hab. ad folia arida Caricis cujusdam in herbosis secus Rio Carrenleofü, Patagonia, Argentina.

LINHARTIA Sacc. et Syd. — Syll. XVI p. 744, XVIII p. 95.

1. *Linhartia Höhnellii* Rehm, Hedwigia XLVII (1905) p. 11. — Asco- 5647 matibus in medio macularum epiphyllarum dispersarum, orbiculatum, 1 mm. lat., e cellulis prosenchymaticis centrifugis c. 10 \times 4-5, dilute flavidulis contextarum, membranacearum, 2-4 sessilibus, primitus globoso-clausis, mox apertis, patellaribus, orbicularibus, disco hyalino, margine tenuissimo fuscido, e cellulis elongatis fuscis composito cincto, 220-250 μ . diam., siccis globulosis, fuscis; ascis clavatis, apice rotundatis, 60-90 \times 8-10, octosporis; sporidiis elongato-fusoides, medio septatis et valde constrictis, strato mucoso

tenui obvolutis, hyalinis, 15-18 \times 3, distichis, paraphysibus filiformibus, 1,5 μ . cr., hyalinis; J-.

Hab. ad folia Psidii, Petropolis prope Rio de Janeiro Amer. austr. (v. HÖHNEL).

Sect. 4. Hyalophragmiæ.

PUTTEMANSIA P. Henn. — Syll. XVIII p. 98.

1. *Puttemansia lanosa* P. Henn. — Syll. XVIII p. 98 — var. uni- 5648
caudata Rick, Broteria V (1906) p. 32. — A typo differt cellula
caudiformi unica, sporidiis paullo minoribus (sed revera etiam in
typo sporidia sunt tantum unicaudata).

Hab. in foliis Lauraceæ cujusdam, Rio Grande do Sul Brasiliæ.

BELONIELLA Sacc., Consp. Discom in Bot. Centralbl. XVIII (1884)
pag. 219, em. Rehm, Disc. pag. 638 — Syll. XIV p. 786, XVI
p. 1149.

1. *Beloniella Galii-veri* (Karst.) Rehm — Syll. VIII, p. 356 [*Pyre-* 5649
nopeziza] — var. *subalpina* Rehm, Ann. Myc. III (1905) p. 411
et Ascom. exsicc. fasc. 35, n. 1607. — Ascomatibus 1,5 mm. diam.,
in sicco epidermide nigrescente caulis obtectis, udis globose pro-
minentibus, disco pallide roseolo, primitus orbiculari, dein sæpe ob-
longo, margine albidulo fimbriatulo cincto.

Hab. in caulibus Galii sp. supra Feilenbach Alpium Baviariæ
(Doct. REHM).

2. *Beloniella Brunellæ* Lind., Ann. Mycol. V (1907) p. 274 et Rehm 5650
Ascom. Exs. n. 1728, Ann. Myc. V (1907) p. 466. — Subiculò per
radices et stipites usque in folia viva serpente, atro, in foliorum
imprimis superiore pagina fibrillose orbiculariter v. stellatim 1 cm.
lat. expanso; ascomatibus sæpe congregatis, innatis, dein pro-
rumpentibus, primitus globoso-clausis, demum disco explanato, ci-
nereo-albo, crasse marginato, 0,5 mm. lat., excipulo crasso, scabro,
extus parenchymatico fusco, intus hyalino; ascis clavatis, apice
rotundatis, 60-70 \times 10-12, octosporis; J +; sporidiis subellipsoideis,
utrinque obtusis, primitus 1-cellularibus, guttis oleosis 2 magnis
repletis, demum 2-(4) cellularibus, hyalinis, 15-17 \times 4,5-5, distichis;
paraphysibus filiformibus 1,5 μ ., versus apicem 3 μ . cr., hyalinis.

Hab. ad parasitice *Brunellam vulgarem*, Silkeborg Jutland, Dania.

3. *Beloniella biseptata* Ferdinands. et Winge, Bot. Tidsskr. XXVIII 5651 (1907) p. 252, cum icon. — Ascomatibus epiphyllis, initio immersis, globosis, plus minusve superficialibus, cupulatis, subplanis, 125-185 μ . diam., disco atro-cinereo; ascis clavatis, deorsum leniter attenuatis, sessilibus, poro J +, 50-70 \times 8,5-10; sporidiis 4- v. 8-nis, cylindraceis v. cylindraceo-ovoideis, utrinque rotundatis, biseptatis, 8,5-12 \times 2,5-4, hyalinis; paraphysibus simplicibus v. sparsim ramosis, ascos æquantibus, superne clavatis.

Hab. ad folia sicca *Veronicæ agrestis*, prope Borris Jutlandiæ.

4. *Beloniella Bromeliacearum* Rick, Broteria v. V (1906) p. 36. — 5652 Ascomatibus erumpentibus, gregariis, 1 mm. latis, primitus globosis et hyphis laxis hyalinis tectis, denique disco rubro-coopertis, margine fimbriato, extus luteo-rubris; hypothecio crasso, ceraceo; ascis 50-60 \times 12, sessilibus; sporidiis ellipsoideis, hyalinis, bicellularibus, in septo non constrictis, 7-12 \times 6, biguttulatis, uni- v. biseriatis; paraphysibus parum evolutis.

Hab. in foliis putridis *Bromeliaceæ* epiphytæ, Rio Grande do Sul Brasilæ.

BELONIDIUM Mont. et Dur. — Syll. VIII p. 496, X p. 27, XI p. 417, XIV p. 786, XVI p. 749, XVIII p. 103.

1. *Belonidium bilimboides* Rehm, Ann. Mycol. V (1907) p. 533. — 5653 Ascomatibus in maculis epiphyllis parvulis, albidulis dispersis, sessilibus, primitus globuloso-clausis, dein urceolatis, tenuissime marginatis, disco hyalino, excipulo parenchymatico, flavidulo, c. 300 μ . diam., siccis convoluto-clausis, subfuscis; ascis fusiformibus, crasse tunicatis, sessilibus, 4-8-sporis, 150-170 \times 25-30, jodo immutatis; sporidiis fusiformibus, utrinque subacutatis, rectis vel subcurvatis, transverse 23-25-septatis, hyalinis, 90 \times 12-14, parallele positis; paraphysibus ramosis, tenerrimis, hyalinis, 1 μ . cr.; hypothecio hyalino.

Hab. ad folium *Myrtaceæ*, Sao Paulo, Brasilæ (USTERI). — Habitus lichenoides sed gonidia desunt; forte *Lecanice fugienti* affinis species.

2. *Belonidium heterospermum* (Schulzer) Sacc. et Trott., *Peziza heterosperma* Schulz. (Esterr. bot. Zeitschr. (1878) p. 320. — Ascomatibus totis albis, sessilibus, initio globosis, dein scutellatis, regularibus,

150-300 μ . diam., margine elevato integro; excipuli contextu molliusculo, ex hyphis tenuibus divergentibus conflato; ascis clavatis, octosporis, paraphysibus paucis, interdum apice capitulatis; sporidiis subdistichis, 3-septatis, hyalinis, oblongo-ovoideis, curvulis, 6-7 \times 2,5, basi in appendicem cylindraceam paullo angustiore septatam 10 μ . longam desinentibus.

Hab. in ligno Fraxini putrescente in silvis prope Vinkovce Hungariæ. — Ascomata mycelio brunneo *Helminthosporii goniotrichi* Corda (conid. 32-34 \times 10-12, brunneis, 6-7-septatis) insident, teste auctore. Cl. Rehm ad *Belon. Aureliam* refert, sed e descriptione satis recedit.

3. *Belonidium javense* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5655 Abt. I (1909) p. 382. — Ascomatibus superficialibus, sparsis, late adnatis, margine incurvato, leniter revoluti, obscure brunneo, 0,7-1,5 mm. latis, 210 μ . cr., subpatellaribus, irregulariter rotundatis, extus levibus nigro-brunneis, disco udo albido-cyaneo, sicco sordide flavido-albo; ascis cylindraceis, supra acutatis, octosporis, 72-75 \times 8; paraphysibus filiformibus simplicibus, 2-2,5 μ . cr.; sporidiis hyalinis, cylindraceis, rectis v. curvulis, utrinque angustatis, obtusulis, plerumque 5-6-septatis, 21-32 \times 3, plerumque 25-30 \times 3, distichis v. tristichis; contextu parenchymatico, hypothecio 120 μ . cr., intus hyalino extus obscure brunneo. J +.

Hab. in ligno putri, Tjibodas in ins. Java.

4. *Belonidium succineum* Rehm, Ann. Mycol. VII (1909) p. 540. — 5656 Ascomatibus dispersis hypophyllis, in macula exarida albida 1 cm. lat. sessilibus, primitus clausis, dein disco patellari, orbiculari, demum convexo, tenuissime marginato, 0,2-0,3 mm. diam., succineis, ceraceis, siccis concaviusculis; ascis clavatis, apice rotundatis, 50 \times 12, 8-sporis, jodo immutatis; sporidiis fusiformibus, obtusis, rectis, medio 1- dein 3-septatis, haud constrictis, hyalinis, 15-20 \times 5, distichis; paraphysibus filiformibus, 1,5 μ . cr., ramosis, hyalinis; excipulo parenchymatico, ex cellulis parvulis contexto, flavidulo, non gelatinoso.

Hab. ad folium coriaceum, Pará Brasilis (BAKER). — Si ascomata ex folii parenchymate exirent, quod incertum est, ad *Fabream* potius spectare videretur.

5. *Belonidium intermedium* Rehm, Ann. Mycol. VI (1908) p. 315. — 5657 Ascomatibus gregariis, sessilibus, primitus clausis, dein patellaribus, disco orbiculari plano, flavo, tenuiter-marginato, excipulo parenchymatico fusco, levibus, 0,2-0,3 mm. siccis, nigrescentibus; ascis

clavatis, versus apicem angustatis, $80 \approx 12$, octosporis, jodo immutatis; sporidiis fusoides-elongatis, utrinque subobtusis, plerumque rectis, 3-septatis, hyalinis, $24-30 \approx 5-5,5$, ad septa paullulum constrictis, distichis; paraphysibus filiformibus 2μ ., versus apicem $3,5 \mu$. crassis, hyalinis.

Hab. ad culmos putrescentes Calamagrostidis canadensis, Madison Wisc. Amer. bor. (A. B. Stout). — *Bel. lacustri* et *Bel. subnivali* proximum, sed satis diversum.

6. *Belonidium Glyceriæ* Peck New York St. Mus. Bull. 139 (1909) 5658 p. 19. — Ascomatibus 1-1,5 mm. latis, gregariis, sessilibus, planis v. convexis, extus glabris seu papillatis, flavidis; ascis subclavatis v. subfusiformibus, obtusis, $120-130 \approx 14-18$; sporidiis oblongis v. subcylindraceis, rectis v. leviter curvis, 3-septatis, sæpe 4-nucleatis, confertis v. distichis, $35-40 \approx 4-5$; paraphysibus filiformibus.

Hab. in culmis emortuis Glyceriæ nervatæ, Lyndonville Orleans co. Amer. bor.

7. *Belonidium collemoides* Rehm, Ann. Mycol. V (1907) p. 533. — 5659 Ascomatibus sparsis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari, tenuiter marginato, excipulo glabro, subtus coarctato, vitellinis, ceraceis, $0,5-1,5$ mm. diam.; ascis subcylindraceis, apice rotundatis, $50-55 \approx 5-8$, octosporis, jodo immutatis; sporidiis fusoides, utrinque acutatis, rectis, 2(-4)-cellularibus, hyalinis, $7-9 \approx 2-2,5$, 1-(interdum apice 2-)stichis; paraphysibus filiformibus, septatis, hyalinis, $2,5 \mu$., versus apicem obtusum 4μ . cr.; hypothecio hyalino, crasso.

Hab. in Jungermannia specie Acaciam arabicam incolente, Sao Francisco, Brasiliæ (ULE). — Habitus fere *Collematis*.

8. *Belonidium guttula* Rick, Broteria v. V (1906) p. 36. — Ascomatibus 300μ . latis, subturbinatis, hyalinis, crystallinis, ceraceis, mollibus, glabris; ascis $35-50 \approx 12$, sessilibus; sporidiis $35-50 \approx 3-5$, multiseptatis, fusiformibus, hyalinis; paraphysibus hyalinis, versus apicem paulatim clavatis, clava in medio angustata.

Hab. in mycelio fusco perisporiaceo, ramos bambusinos occupante, Rio Grande do Sul, Brasiliæ.

9. *Belonidium beloneum* (Nyl.) Sacc. et *Belonidium abscedens* (Nyl.) 5661 Sacc. — Ita scribenda, nec *Bel. beloneum* (Cr.) et *Bel. abscedens* (Cr.) ut in Sylloge VIII, pag. 498, nam ambæ species tribuendæ sunt cl. Nylanderovi qui in Flora 1864 p. 521 primo descripsit deditque dimensiones sporidiorum, nempe: *B. belonei* sporidia $60-90 \approx 3$; *B. abscedentis* sp. $22-25 \approx 10-11$.

BELONIUM Sacc. — Syll. VIII p. 492, X p. 26, XI p. 417, XIV p. 785, XVI p. 1149, XVIII p. 107.

1. **Belonium valdivianum** Speg., Fungi Chilenses (1910) pag. 127. — 5662

Eubelonium; ascomatibus sparsis v. laxè gregariis, parvis, sessilibus, extus atris, 0,5-2 mm. diam., margine acuto glabro elevatulo, disco planiusculo subcarneo, totis coriaclello-subcarnosulis; ascis clavulatis, sublongiuscule pedicellatis, 80-90 \times 9-10, octosporis; paraphysibus filiformibus sursum vix subincrassatulis obvallatis; sporidiis e naviculari subfusoides, utrinque acutiusculis, mediocribus, hyalinis, primo continuis pluriguttulatis, dein triseptatis, ad septum medium non v. vix constrictulis, 18-20 \times 3-5.

Hab. ad ramos emortuos dejectos Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr.

2. **Belonium chilense** Speg., Fungi Chilenses (1910) p. 127, cum ic. 5663

— Ascomatibus sparsis v. laxè gregariis, parvis, sessilibus, planiusculis, extus atris. margine elevato repandulo pallidiore pruinuloso, disco e glauco cinereo, totis coriaclello-subcarnosulis, 0,3-1 mm. diam.; ascis subcylindraceis modice cuneato-pedicellatis, 80 \times 8, octosporis, paraphysibus 1,5-2 μ . cr. circumdatis; sporidiis subclavulato-bacillaribus, leniter curvulis, 5-septatis, hyalinis, mediocribus, 30 \times 2-2,5.

Hab. in ramis emortuis Muehlenbeckiæ chilensis, Cerro Caracol de Concepcion Chile Amer. austr.

3. **Belonium spermatoideum** Strasser, Verh. k. k. zool.-bot. Gesellsch. 5664

Wien Bd. LVII (1907) p. 330. — Ascomatibus sparsis v. quandoque subgregariis, primum breviter crasseque stipitatis, globosoclausis v. depressis, subdiscoideis demumque tenuiter depresso marginatis et discum convexum ostendentibus, udis flavido-albis, ad marginem præcipue subpellucidis, glabris, 1-2 mm. diam., tuniceraceis, siccis flavo-rubidis; ascis subcylindraceis supra leniter expansis, 60-80 \times 5-6, octosporis; sporidiis distichis, obtuse fusoides, hyalinis, sæpe curvis, multis germinantibus, bilocularibus v. nonnullis indistincte quadrilocularibus, bi- v. quadriguttulatis, 12-14 \times 2-3, sæpe sporulis ovoideis spermatoideis 2-3 μ . cr. numerosis immixtis; paraphysibus filiformibus; excipulo prosenchymatico flavido; J-.

Hab. in fragmentis ligneis fagineis, Sonntagberg Austriae inf. — *B. immarginato* Karst. affine.

4. **Belonium rubrum** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5665

(1906) p. 41. — Ascomatibus minutis, 200 μ . c. diam., depressis,

rubro-brunneis, solitariis, molle ceraceis; excipulo prosenchymatico rubro-brunneo, cellulis marginalibus filiformibus prædito; ascis clavatis, basi breviter pedicellatis, $50-70 \approx 8-9$, supra obtuse conoideis, octosporis; sporidiis pluries seriatis, cylindraceis, demum multiseptatis, hyalinis, quandoque curvulis, $20-24 \approx 2$; paraphysibus filiformibus, supra $2-3 \mu$. cr.

Hab. in squamis pineis putrescentibus, in silvis prope Rathanow Germaniæ. — A *B. pineti* (Batsch.) magnitudine, colore etc. bene distincta species.

5. *Belonium Junci* Jaap, Abh. Bot. Ver. Prov. Brandenb. IL (1907) 5666

p. 11. — Ascomatibus gregariis in maculis pallescentibus sæpe insidentibus, primum globoso-clausis, subimmersis, dein apertis, sessilibus, margine dentatis, disco flavido-albo, extus flavo-brunneis et nigro-brunneo maculatis, subrugulosis, udis pallidioribus, siccis obscure brunneis et margine revolutò præditis, tenue ceraceis, $150-250 \mu$. diam.; ascis fusoido-clavatis, supra acutato-obtusis incrassatis, $28-36 \approx 4-5$, tetrasporis, J +; sporidiis cylindraceo-fusoides v. subglobosis, rotundatis, rectis v. curvulis, hyalinis, unicellularibus et pluriguttulatis, demum bilocularibus, $10-18 \approx 1,5-2$, distichis; paraphysibus filiformibus, hyalinis.

Hab. in foliis vetustis putrescentibus Junci acutiflori pr. Triglitz in Brandenburgia.

6. *Belonium coroniforme* Rehm, Ann. Mycol. V (1907) pag. 534. — 5667

Ascomatibus in apice cæspitis *Orthotrichi* 4-6 arcte confertis, in mycelio crasso hypharum hyalinarum sessilibus, patellaribus, tenuiter marginatis, roseolis, glabris c. 300μ . alt., 350μ . lat., excipulo pseudo-prosenchymatico, flavidulo; ascis clavatis, apice rotundatis, $100-120 \approx 10$, octosporis, jodo immutatis; sporidiis elongato-fusiformibus, utrinque subobtusis, rectis, transverse 3-7-9-septatis, ad septa haud constrictis, hyalinis, $2-3$ -stichis, $25-30 \approx 4,5$; paraphysibus longissimis, filiformibus, septatis, hyalinis, 2μ . cr.

Hab. in *Orthotricho* prope balneum Gastein Styriæ (Dr. C. LAUBINGER).

7. *Belonium sulphureo-testaceum* v. Höhn., Ann. Myc. v. III (1905) 5668

p. 553, cum icon. — Ascomatibus sparsis, plerumque minutis, $0,5$ mm. cr., tenui-carnosulis, primum flavo-sulphureis, viridulo tinctis, depresso discoideis, basi parum angustatis, siccis margine incurvatis, e rubro-brunneis fere lateritiis; hypothecio plectenchymatico fibroso-celluloso; ascis tenuiter tunicatis, fusoido-clavatis, octosporis, $80 \approx 10-11$; paraphysibus filiformibus, 1μ . cr., apice crassiu-

sculis (2 μ .) ibique sæpe curvulis; sporidiis distichis, hyalinis, ellipsoideo-elongatis, utrinque rotundatis, plerumque rectis raro curvulis, plerumque quadrilocularibus, ad septa constrictulis, eguttulatis, 14-20 \times 3-5,5, plerumque 16-18 \times 4-5; J +.

Hab. ad terram prope Allentsteig Austriæ inf.

8. *Belonium albido-roseum* (Rehm) Rehm, in Jaap Zur Fl. v. Glücksburg, Schr. Naturw. Ver. f. Schlesw.-Holst. Bd. XIV, Heft 2, p. 300. — Ita vocanda *Pezizella albido-rosea* Rehm, Disc. p. 682 — Syll. XI, p. 405. 5669

9. *Belonium obiectum* Rehm, Öst. Bot. Ztschr. LVI (1906) p. 346. 5670
(Nomen nudum).

Hab. in Rhododendro ferrugineo, Alpeiner-Alpe Stubai Austria.

LASIOBELONIUM Sacc. — Syll. VIII p. 502, XIV p. 789, XVIII p. 106.

1. *Lasiobelonium lachnoides* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905 p. 6). — Ascomatibus gregariis, sessilibus, primitus globosoclausis, brevissime cyathoideo-stipitatis, dein disco urceolato, demum irregulariter explanato, albidulo, excipulo imprimis versus marginem pilis creberrimis rectis, obtusis, septatis, scabriusculis, dilute flavidulis, ad apicem fere hyalinis, 100-150 \times 4, adpressis obsessis, ceterum pseudoprosenchymatico, 0,5-1,5 mm. lat., 1 mm. alt., ceraceis; ascis cylindraceis ad apicem rotundatis, 90-100 \times 7-8, octosporis; sporidiis cylindraceis, utrinque subobtusis, rarissime inferius acutatis, rectis, 3-septatis, hyalinis, 18-24 \times 3, distichis; paraphysibus filiformibus, sæpe versus apicem acutatis, hyalinis, septatis, 2 μ . cr.; poro ascorum jodii ope cæruleo-tincto. 5671

Hab. in ligno decorticato Carpini Betuli et Alni glutinosæ, Berencsfalu, prope Selmeczbánya Hungariæ (Kmetz). — *Lachnella* extus similis, sporidiis plane divergens species, proxima *Lasiobelonio subflavido* Ellis et Ev., pilis autem alienis diversa, nec non paraphysibus ad formam *Lachni* plus minusve lanceolato-acutatis.

2. *Lasiobelonium globulare* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) pag. 387. — Ascomatibus gregariis, basi angustata insidentibus, primum globoso-clausis, dein supra rotundato-apertis, subscutellatis, disco parvo ochraceo-aurantiaco, 0,5 mm. circ. diam. depresso, extus et ad marginem revolutum albis, dense albo-pilosis; ascis sessilibus, clavatis, supra rotundato-obtu- 5672

sis et vix conoideis, octosporis, $100-110 \approx 13-14$; paraphysibus septatis, filiformibus, acutis, 2 μ . cr.; sporidiis hyalinis, distichis v. tristichis, fusoideis, rectis, utrinque acutis, $5-8$ -septatis, $40-60 \approx 5,5-5$. J +.

Hab. in vaginis putrescentibus Bambusæ in horto bot. Buitenzorg Java.

3. *Lasiobelonium aquilinellum* v. Höhnelt, *Ergebn. Bot. Exp. Südbras.* 5673 1901, *Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr.* p. 32. — Ascomatibus gregariis, sessilibus, $200-350 \mu$. diam., obconoideis, pilosulis, basi in pedicellum $100-120 \mu$. long., $65-70 \mu$. cr. attenuatis, pallide griseo-brunneolis v. sordide flavidis, disco pallido; contextu prosenchymatico; ascis cylindraceo-clavatis supra conoideo-acutatis, obtusiusculis, $140-150 \approx 16-18$, basi in pedicellum tenuem 40μ . long. angustatis, octosporis; sporidiis parallele dispositis, hyalinis, quadrilocularibus, cylindraceis, utrinque attenuato-obtusis, $52-56 \approx 2-3,5$; paraphysibus tenuiter filiformibus, supra non incrassatis. J +.

Hab. in pagina inf. frondium brunnescentium *Pteridii aquilini*, M. Jaraguá prope Taipas Sao Paulo Brasilia.

STROSSMAYERA Schulz. *Æst. bot. Zeitschr.* (1881) p. 314 (Etym. in honorem Episcopi J. G. STROSSMAYER, Botanices mæcenatis). — Ascomata sessilia, primo globosa, denique cupuliformia, mollia, glabra, in mycelio *Helminthosporii* insidentia. Asci clavati, substipitati, octospori. Sporidia oblongo-ellipsoidea, 3-septata, hyalina, basi appendicula crassiuscula, teretiuscula, equidem septata demum secedente aucta. — Sporidiorum appendiculâ peculiari mox dignoscendum genus.

1. *Strossmayera Rackii* Schulz., l. c. cum fig. spor. — Ascomatibus 5674 minutissimis $150-300 \mu$. diam., albis, subregularibus, marginatis, cellulis parenchymatis hyalinis ex hyphis tenuissimis ascendentibus contextis; ascis $92 \approx 11-13$; paraphysibus paucis interdum subcapitellatis; sporidiis di-tristichis, $6 \approx 2,5$, triseptatis, non constrictis, oblongo-ellipsoideis utrinque rotundatis, hyalinis, appendicula cylindracea $11 \approx 2$, apice rotundata, leniter curva, 3-septata, tarde secedente.

Hab. in mycelio *Helminthosporii gongrotrichi* ad ramulos *Fraxini* in silva Vidor pr. Vinkovce Hungariæ.

TRICHOBELONIUM Sacc. — Syll. VIII p. 495, XVI p. 747, XVIII p. 99.

1. *Trichobelonium virgineum* Rick, Broteria V (1906) p. 224. — Su- 5675
biculo albo arachnoideo; ascomatibus substipitatis, 1-2 mm. latis, extus intusque hyalino-albis, dein disco flavescente, carnosus; extus pilis vertice globosis, septatis, albis, 0,1 mm. longis, glandulosis, rigidis, dense vestitis; ascis clavatis, circ. 150 \times 12, breviter pedicellatis, apice angustatis; sporidiis filiformibus, 100 \times 2,5, octonis, hyalinis, multiseptatis; paraphysibus filiformibus, ramosis.

Hab. in Palmis putridis in Brasilia.

2. *Trichobelonium distinguendum* Syd., Myc. germ. fasc. XIV-XV n. 704 5676
(1908) et Ann. Mycol. VI (1908) p. 479. — Ascomatibus gregariis, mycelio ex hyphis brunneolis septatis ca. 5 μ . crassis composito, insidentibus, tenuiter marginatis, disco plano albido-griseo vel leniter albido-cærulescente extus subhyalinis, levibus, $\frac{1}{2}$ -2 mm. latis, ceraceis, in sicco vix vel parum involutis et sordide albidis v. albo-griseis; ascis cylindræco-clavatis, apice obtuse attenuatis, 60-80 \times 6-8, octosporis; sporidiis distichis, subcylindræcis, obtusis, rectis vel lenissime curvulis, primo continuis et pluribus guttulis oleosis repletis, dein medio 1-septatis (an tandem pluriseptatis?), hyalinis, 18-26 \times 2 $\frac{1}{2}$ -3 $\frac{1}{2}$; paraphysibus filiformibus, hyalinis, ca. 1 $\frac{1}{2}$ μ . crassis, ascos æquantibus vel parum superantibus.

Hab. in culmis emortuis Phagmitis communis, Schmöckwitz pr. Berolinum Marchiæ Brandenb. (Sydow). — Inter *Tapesiam hydrophilam* et *Trichobelonium retincolam* species fere media.

3. *Trichobelonium albo-granulatum* Rehm, Ann. Mycol. VII (1909) 5677
p. 540. — Ascomatibus in epiphylo late albide granulato, mycelio hypharum hyalinarum arcte congregatarum, crystallia irregularia plurima obtegentium obducto sessilibus, primitus globosoclausis, dein orbiculariter applanatis, margine tenuissimo mycelii cinctis, disco hyalino, subflavidulo, excipulo parenchymatico, hyalino, 0,5-1,5 mm. diam.; ascis clavatis, crassis, apice rotundatis, 80-90 \times 20, octosporis; sporidiis ellipsoideis, utrinque obtusis, rectis v. subcurvatis, transverse 5-7-septatis, cellula tertia latiore, 25 \times 7-8 distichis; paraphysibus filiformibus, 1 μ . cr. hyalinis conglutinat.

Hab. ad folium coriaceum, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — Magnitudine ascomatum et conformatione sporidiorum valde distincta species.

VELUTARIA Fuck. — Syll. VIII p. 488, XIV p. 785.

1. *Velutaria Polytrichi* Rehm, Hedwigia XXVIII (1889) p. 348. — 5678

Ascomatibus sessilibus, primitus globosis, dein urceolatis, crasse marginatis, demum explanatis et irregulariter tenuiter marginatis, fusco-nigris, disco pallidiore, crasse parenchymatice flavo-contextis, glabris, c. 0,2-0,4 mm. diam.; ascis clavatis, apice subrotundatis et incrassatis, $36 \times 6-8$, ? octosporis; sporidiis fusiformi-clavatis, obtusis, rectis, 1-cellularibus, hyalinis, $7-8 \times 3$, distichis; paraphysibus filiformibus, teneris, superne dichotomis, apice rotundatis, dilatatis 5 μ . cr., flavis. J-.

Hab. in pedunculis fructiferis emortuis *Polytrichi juniperini*, prope Radnitz Moraviæ (v. NIESSL). — Ob immaturitatem incertum est an vere ad *Velutariam* pertineat.

Sect. 5. Hyalodictyæ.

DICTYOMOLLISIA Rehm, Ann. Mycol. VII (1909) p. 540 (Etym. *dictyon* rete et *Mollisia*). — A gen. *Mollisia* ascis oblongo-globosis, sporidiis transverse et perpendiculariter septatis, inde parenchymaticis diversum genus. — Primum genus dictyosporum inter *Pezizaceas*!

1. *Dictyomollisia albido-granulata* Rehm, loc. cit. — Ascomatibus hy- 5679
pophyllis, in maculis vix flavidulis, haud marginatis plerumque solitariis, rarius binis sessilibus, primitus globoso-clausis, dein urceolatis, demum disco orbiculari dilute aureo, crasse granulato-marginato, tandem interdum circulariter convolutis, extus albis, granulatis, excipulo crasso parenchymatico e cellulis sexangularibus hyalinis, 20 μ . latis formato, 0,5-1,5 mm. diam., siccis involutis; ascis oblongo-globosis, haud stipitatis, $45-48 \times 25-30$, octosporis, jodo immutatis; sporidiis ovoideo-oblongatis, utrinque rotundatis, transverse 5-7-, perpendiculariter 1-2-septatis, hyalinis, medio subconstrictis, $20-22 \times 8-10$; paraphysibus tenerrimis, ascos ambientibus.

Hab. ad folia Lauraceæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.).

Sect. 6. Scolecosporæ.

BELONIOPSIS Sacc. — Syll. VIII p. 351, XVI p. 752.

1. *Beloniopsis tropicalis* Rick, Broteria V (1906) p. 36. — Ascoma- 5680
tibus sessilibus, 2 mm. latis, applanatis, ceraceis, extus glabris, succineis, centro obscurioribus; ascis 25×5 , octosporis; sporidiis filiformibus, longitudine asci, tenuissimis, hyalinis; paraphysibus filiformibus, apice sphaericis, hyalinis, epithecium nullum formantibus.

Hab. in ramo deciduo Pini, Rio Grande do Sul Brasiliæ.

2. *Beloniopsis pamparum* Speg., Myc. Arg. IV, in An. Mus. Buenos 5681
Aires (1909) p. 450, fig. 38. — Minuta, sparsa, atra, glabra, rigidula, patellata, 120-200 μ . diam. subtus late adnata convexula, supra concaviuscula ambitu repandula, sed integra; ascis clavulatis, densiuscule furcato-paraphysatis, apice late rotundatis, $45-60 \times 10-15$, breviter crasseque pedicellatis, octosporis, jodo immutatis; sporidiis fasciculatis, rectiusculis, fusoideis, utrinque acutiusculis, $30-35 \times 3-4$, sæpius 5-7-pseudo-septatis, hyalinis.

Hab. ad culmos aridos Aristidæ sp., Juarez Celman pr. Cordoba, Argentina.

GORGONICEPS Karst. — Syll. VIII p. 504, X p. 30, XI p. 419, XVI p. 753, XVIII p. 112.

1. *Gorgoniceps Baccharidis* Rehm, Ascom. Exsicc. fasc. 43, n. 1801 5682
et Ann. Mycol. VII (1909) p. 134. — Ascomatibus dispersis, sessilibus, primitus globoso-clausis dein patellaribus, disco orbiculari, rubidulo, tenuissime obscurius marginato, extus fuscidulis, glabris, excipulo tenuiter parenchymatice contexto, 0,15-0,2 mm. diam., siccis globoso-contractis; ascis cylindraceis, apice rotundatis, $80 \cdot 90 \times 9$, 8-sporis; sporidiis filiformibus, rectis, pluri-septatis, hyalinis, $70 \times 1,5$, parallele positæ; paraphysibus longis, filiformibus, hyalinis, 1,5 μ . cr.

Hab. ad folia *Baccharidis genistelloidis*; Sao Leopoldo, Rio Grande do Sul Brasilia (THEISSEN).

2. *Gorgoniceps tremellina* (Bon.) Sacc. et Trav. — Syll. XIX, p. 793 5683
— *Leptosporium* Bonorden in Bot. Zeit. 1857, p. 211, t. IV, f. C.
— Ascomatibus laxè gregariis, sessilibus, superficialibus, primo clausis, subglobosis, mox lenticularibus discoideo-apertis, 2 mm. latis, excipulo fusco-atro; disco demum convexo immarginato, gela-

tinoso, flavido; ascis tereti-clavatis, apice rotundatis, deorsum sensim tenuatis; paraphysibus filiformi-clavatis, dichotomisasco brevioribus obvallatis; sporidiis filiformibus, sæpe curvulis, utrinque obtusulis, hyalinis, continuis, asco brevioribus.

Hab. in ramis dejectis Salicis sp. in Germania.

3. *Gorgoniceps candida* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 451. — Pusilla, laxe gregaria, alba, subsessilis, turbinata, carnosulo-ceracella, subsolitaria v. 2-5-gregaria, serius subpatellaris, 150-300 μ . diam., glaberrima, margine integro; ascis subfusoides, filiformi-paraphysatis, utrinque attenuatis, brevissime noduloso-suffultis, $70 \approx 7$, octosporis; sporidiis filiformibus multiguttulatis, fasciculatis, utrinque obtusulis, $50-60 \approx 1,5$ rectis v. vix flexuosis, hyalinis.

Hab. ad folia basalia Tillandsiæ Duratii arida in horto Auctoris, La Plata Argentina.

4. *Gorgoniceps phragmospora* Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 451. — Parva, sessilis, ceraceo-ochroleuca, disco pruinula e roseo cineresciente tecta, seriata, sæpe bi-ternato-confluens, 1-3 mm. long., 1-1,5 mm. lat., coriacea, supra demum convexula, margine integro; ascis linearibus apice rotundatis, breviter cuneato-pedicellatis, $180-200 \approx 8$, octosporis; paraphysibus filiformibus, densis, apice grumoso-coalescentibus; sporidiis asci longitudine, articulis utrinque truncato-rotundatis, $2,5-3 \mu$. longis, hyalinis.

Hab. ad palos diu intemperiei expositos, Parque de La Plata Argentina. — Habitus nonnihil licheninus v. corticioideus.

5. *Gorgoniceps jowensis* Rehm, Ann. Mycol. IV (1906) p. 338. — Ascomatibus dispersis, sessilibus, subglobosis, in stipitem brevissimum crassum elongatis, demum disco patellari, marginato, mox convexulo et emarginato, albescente, extus glabris, cæruleo-viridulis, 0,2-0,5 mm. diam. et alt., siccis disco suburceolato, dilute fuscidulo, excipulo ad basim fusco ceterum hyalino, prosenchymatico; ascis clavatis, apice rotundatis, $80-100 \approx 10-12$, octosporis, jodo immutatis; sporidiis subcylindræis, interdum subcurvatis, plerumque rectis, utrinque rotundatis, transverse 7-septatis, haud constrictis, hyalinis, $30-33 \approx 3-4$, distichis; paraphysibus filiformibus, 2μ ., versus apicem $2,5-3 \mu$. cr. et subcurvatis, hyalinis.

Hab. ad lignum vetustum, Mt. Pleasant Iowa Americæ bor. (SEEVER). — Affinis *Gorgonicipiti pumilioni*.

ERINELLA Sacc. Syll. VIII p. 507, X p. 30, XI p. 419, XIV p. 789, XVI p. 753, XVIII p. 113.

1. *Erinella æruginosa* P. Henn., Hedwigia XLV (1905) pag. 30. — 5687
 Mycelio æruginoso; ascomatibus sparsis v. aggregatis, stipitatis, primo subgloboso-clausis, dein cupulatis, ceraceis, extus dense æruginoso-tomentosis, pilis c. 100-200 \times 3-3,5, æruginosis. septatis, disco pallido levi, margine albido fimbriato, c. 1-2 mm. diam.; ascis clavatis, apice obtuse rotundatis, 8-sporis, 80-100 \times 9-11, paraphysibus filiformibus, 2-2,5 μ . cr., apice paullo incrassatis; sporidiis subdistichis v. subtristichis, longe fusioideis, utrinque acutiusculis, 3-septatis, dein constrictis, hyalino-cyanescentibus, 30-45 \times 3,5-4.
Hab. in ligno putri *Quercus pedunculatæ* in silvis prope Michailowskoe Rossicæ (MOSSOLOFF).

2. *Erinella africana* Syd., Deutsche Zentral-Afrika Exped. (1907-1908) 5688
 II Bd. p. 100. — Ascomatibus sparsis, distincte stipitatis, cupuliformibus, extus albo-flavidis, tenuiter pruinuloso-tomentosis sed vix pilosis, disco carneolo, margine crassiusculo, leniter inflexo, $\frac{3}{4}$ -1 $\frac{1}{2}$ mm. diam.; stipite concolore $\frac{1}{2}$ -1 mm. longo; ascis cylindraceis, apice obtusis, breviter stipitatis, 70-115 \times 8-11, octosporis; sporidiis bacillari-fusioideis, continuis, hyalinis, utrinque lenissime attenuatis, 32-42 \times 3, paraphysibus numerosis, simplicibus, linearibus, rectis, ascos parum superantibus, c. 3-3,5 μ . cr.

Hab. ad ramos putres, Bukoba in Africa tropicali.

3. *Erinella difficillima* (v. Höhn.) Sacc. et Trott., *Dasyscyphella diffi-* 5689
cillima v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 393. — Ascomatibus solitariis v. parce cæspitosis, vix pedicellatis, basi angustatissima insidentibus, 0,5-1 mm. sessilibus, depresso-patellaribus, margine leniter involuto, extus et margine crebre albo-pilosis; contextu distincte fibroso; disco pallide flavo-aurantiaco; ascis cylindraceo-clavatis, supra obtuse conoideis, basi sensim in pedicellum 20-40 μ . longum tenuatis, 130-140 \times 12, octosporis; paraphysibus tenuissimis, filiformibus, septatis, apice acutis, 2-2,5 μ . cr.; sporidiis pluries seriatis, rectis vel curvulis, cylindraceo-filiformibus, basi crassioribus, utrinque obtusulis, 7-13-septatis, 60-115 \times 2,5-3. J +.

Hab. in vaginis putrescentibus *Bambusæ*, in horto bot. Buitenzorg in ins. Java. — *Er. similimæ* (B. et Br.), *Er. calosporæ* Pat. et Gail., *Er. tjibodensi* P. Henn., *Er. disciformi* P. Henn. affinis.

4. *Erinella javensis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII 5690
Syll. fung. XXII (1-1913)

Abt. I (1909) p. 394. — Ascomatibus gregariis, stipitatis e globoso subpatellariter effusis, 1-1,5 mm. latis, extus albis, disco pallide vitellino; stipite 0,5 mm. long., 180-200 μ . cr., alto, pilosulo, intus cum excipulo fibroso, margine ascomatis asperulo, subcurvulo; hypothecio laxo plectenchymatico ex hyphis 2-3 μ . cr. formato; ascis cylindraneo-clavatis, supra obtusulis, $64 \times 5,5$, octosporis; paraphysibus filiformi-lanceolatis, supra acutiusculis, ascos parum superantibus; sporidiis polystichis, plerumque rectis, acicularibus, utrinque acutiusculis, contentu nitido homoganeo, apparenter unilocularibus, sed vero 10-15 septis tenuibus transverse divis, $16-23 \times 1,6-2$. J +.

Hab. in ramulis siccis in Horto bot. Buitenzorg in ins. Java.

5. *Erinella subcervina* Bres., in Rick Fungi austro-amer. III, n. IV, 5691 n. 51, Ann. Myc. v. IV (1906) pag. 309. — *Lachno avellaneomelleo* Starb. affinis sed sporidiis 3-septatis diversa.

Hab. in Brasilia, America austr.

Fam. 5. Ascobolaceæ BOUD.

Sect. 1. Hyalosporæ.

ASCOPHANUS Boud. — Syll. VIII p. 528, X p. 32, XI p. 421, XIV p. 793, XVI p. 758, XVIII p. 116.

1. *Ascophanus argentinensis* Speg., Myc. Arg. IV, in An. Mus Buenos Aires (1909) p. 452. — Ascomatibus dense gregariis superficialibus primo obconico-turbinatis, dein subcollapsis atque hemisphaericis, aurantiis, 2-3 mm. diam., extus glabris, contextu grosse parenchymatico-vesiculoso; ascis apice rotundatis cylindraceis, basi abrupte cuneatis, breviter pedicellatis, $160-200 \times 25$, octosporis, jodo leviter tinetis; paraphysibus filiformi-clavulatis 5-10 μ . cr., aurantiis; sporidiis mono-distichis tunica mucosa crasse obvolutis, utrinque obtuse rotundatis, $25-28 \times 14-18$, hyalinis, sæpius 1-nucleatis.

Hab. in stercore felino putri in domo auctoris, La Plata Argentina. — Ad Pezizeas notis plurimis nutat.

2. *Ascophanus pseudogranuliformis* Speg., Myc. Arg. in An. Mus. Buenos Aires (1909) p. 453. — Ascomatibus sparsis, turbinatis, sessilibus, citrinis, glabris, minutis, serius fere cylindraceis, 1-1,5 mm. alt. et lat., supra truncatis, margine integris; ascis cylindra-

ceis longissime pedicellatis, aparaphysatis, apice subtruncatis, jodo immutatis, $75-85 \times 10-12$ p. sp.; stipite 80×5 ; sporidiis cylindraceo-ellipsoideis, hyalinis, octonis, utrinque obtuse rotundatis, $13-15 \times 7-7,5$, sæpe centro 1-guttatis.

Hab. in fimo vaccino putri, Cerro San Bernardo, Salta, Argentina. — Imprimis ascis aparaphysatis longissime pedicellatis dignoscendus.

3. *Ascophanus Coemansii* Boud. Mém. Ascob. p. 54, tab. X, 30, in 5694

Ann. Sc. Nat. 5 ser. Bot. t. X, 1869, *Ascobolus granuliformis* Coem., Kickx p. p. — Minutus 0,5-1 mm. latus, sparsus v. aggregatus, aurantiaco-olivascens, convexus, glaber, paraphysibus capitato-clavatis, clava luteo-virente; receptaculo levi, disco convexo minute papillato, aurantiaco-olivascens aut fulvescente; paraphysibus septatis, simplicibus aut divisis, ad apicem capitatis, luteo-virentibus, ad basim hyalinis; ascis minutis, subamplis, clavatis, attenuatis, hyalinis; sporidiis oblongo-ovoideis, subfusiformibus, minutis, hyalinis, maturis liberis, junioribus gelatina aggregatis.

Hab. ad stereus vaccinum vetustum, spersus v. aggregatus, circa Parisios et Montmorency Galliæ et in Belgio. — Ab *Asc. minutissimo* statura et colore diversus, ab *A. granulato* colore, forma et magnitudine ascorum sporidiorumque et paraphysibus apice magis inflatis coloratis.

4. *Ascophanus lacteus* (Cke. et Phill.) Sacc. — Syll. VII, p. 528 — 5695

var. *macrosporus* Heimerl, Niederösterr. Ascob. p. 25, t. I, f. 10 extr. — Ascis $88-120 \times 21$, clavatis, paraphysibus distincte septatis cylindraceis obvallatis; sporidiis subdistichis, $12-13,5 \times 8-8,5$.

Hab. frequenter in fimo equino, Schönbrunn et in stercore putrido cervino, Pressbaum Austriæ. — var. *microsporus* Heimerl, l. c. p. 25, t. I, f. 9. — Ascis $73-80 \times 10-14$, paraphysibus filiformibus obsolete septatis obvallatis; sporidiis submonostichis, $8,5 \times 9,6$. — Cum præcedente.

5. *Ascophanus belgicus* B. R. S. in Saccardo, Not. Myc. VI, Ann. 5696

Myc. v. III (1905) p. 507. — Ascomatibus sessilibus, glabris, 1-2 mm. diam., sparsis v. subconfluentibus, hemisphæricis, mox disco planiusculo, papillato, initio fulvis, dein purpurascentibus, denique atro-brunneis, margine reflexo undulato; ascis cylindraceis, apice obtusis, breve noduloso-stipitatis, $75-90 \times 10$, stipite 14-16 p. long.; paraphysibus copiosis, asco longioribus, 2-3-furcatis clavula interdum prolifera hyalina terminatis; sporidiis monostichis, ellipsoideis, continuis, crasse 1-guttatis, hyalinis, $10-12 \times 8-10$.

Hab. in fimo Cuniculorum, La Panne, Furnes Belgii.

6. *Ascophanus chartarum* Kirschst., Verh. Bot. Ver. Brandenburg, 5697 XLVIII (1906) p. 46. — Ascomatibus gregariis, sessilibus, flavo-succineis v. flavido-rubris usque ad 0,5 mm. diam.; ascis late clavatis in pedicellum tenuatis, supra rotundatis, 36-40 \times 10, octosporis; sporidiis suboblique distichis, hyalinis, irregulariter ovoideis, 6-8 \times 3; paraphysibus filiformibus, hyalinis, supra usque 2 μ . cr.

Hab. in charta putrida, prope Rathenow Germaniæ.

7. *Ascophanus magnificus* Kirschst., Verh. Bot. Ver. Brandenburg, 5698 XLVIII (1906) p. 46. — Ascomatibus sparsis, insidentibus, primum globosis, dein depresso lenticularibus, pallidis fere hyalinis, demum roseis, molle ceraceis, ob ascos prominentibus punctulatis, 0,5-2 mm. diam.; excipulo parenchymatico, flavido v. roseo; ascis clavatis, vix pedicellatis, crasse tunicatis, apice depressis crasseque tunicatis, operculatis, octosporis, 275-300 \times 35-40; sporidiis monostichis v. supra distichis, hyalinis, unilocularibus, eguttulatis, ellipsoideis, bitunicatis, tunica externa asperulata, 20-25 \times 13-16; paraphysibus infra roseis, septatis, 6 μ . circ. cr., supra clavatis hyalinis, guttulado-farctis, 10-12 μ . cr.

Hab. ad truncum pineum putrem prope Gross-Behnitz Germaniæ.

CUBONIA Sacc. — Syll. VIII p. 527, XIV p. 792.

1. *Cubonia niepolomicensis* Rouppert, Bull. Ac. Sc. Cracovie (1908) 5699 p. 650. — Fungillus argenteo-albus, 0,5-1 mm. latus, excipulo pseudoparenchymatico; ascis cylindraceis, octosporis, 140-180 \times 24, paraphysibus filiformibus longioribus; sporidiis perfecte sphaericis, 12-15 μ . diam. æquantibus, hyalinis, dein paululo lilacinis, verrucosis.

Hab. in fimo canino, in silva Puszcza Niepolomska dicta, in Polonia.

EXOgone P. Henn., Verh. Bot. Ver. Prov. Brandenburg L (1908) p. 130 (Etym. *exo* extus et *goneia* generatio). — Excipulum nulum; ascomata depresso globosa, libera, supra hypothecium verruciforme pseudoparenchymaticum efformata; asci clavati, octospori, paraphysibus ascos superantibus; sporidia ellipsoidea v. subglobosa, hyalina, tunica verrucoso-punctata; mycelium saprophyticum repens. — Genus incertæ sedis.

1. *Exogone Keiseriana* P. Henn. l. c. p. 130, cum icon. — Ascoma- 5700

tibus solitariis v. gregariis, subglobosis, albidis, basi applanatis, flavidis, 1-2 mm. diam., mycelio repente, septato, ramoso; ascis clavatis, supra rotundatis v. applanatis, octosporis, 160-200 × 25-33; paraphysibus sæpe ramoso-septatis, supra subclavatis et 10-12 μ . incrassatis; sporidiis supra plerumque distichis, ellipsoideis dein verisimiliter subglobosis, primum levibus dein punctato-verruculosis hyalinis v. tunica flavidula præditis, 15-22 × 15-18.

Hab. in foliis pineis et in caulibus Brassicæ oleraceæ, Schöneberg Berolini Germaniæ.

Sect. 1. Phæosporæ.

ASCOBOLUS Pers. — Syll. VIII p. 514, X p. 31, XI p. 420, XIV p. 793, XVI p. 760 et 1149, XVIII p. 118.

1. *Ascobolus Michaudi* Boud., Icon. Mycol. t. II, pl. 409 (1906) Hist. 570. et Classif. Discomyc. Europe (1907) p. 71. — Minutus 1-2 mm. latus, turbinatus aut breviter stipitatus, luteus, extus glaber hymenio ascis nigro-punctatus; ascis clavatis, octosporis, 150-200 × 20-25, paraphysibus linearibus, ad apicem vix incrassatis, septatis, 5-7 μ . crassis et ut ascis in gelatina lutea immersis; sporidiis ellipsoideis, striatis, junioribus albis, maturis violaceis et irregulariter in ascis maturascentibus, 23-25 × 13-14.

Hab. in fimo equino in départ. Rhône, Gallia. — Ab *Asc. marginato* differt statura minori, colore semper flavo, ascomate extus glabro etc.

2. *Ascobolus immersus* Pers. — Syll. VIII, p. 523 — var. *andinus* 5702 Speg., Myc. Arg. IV in Ann. Mus. Buenos Aires (1909) p. 452. — Ascomatibus hemisphæricis, parvis, 1-1,2 mm. diam., supra truncatis, viridi-flavescentibus glaberrimis; ascis tetrasporis 200 × 60, paraphysibus non clavulatis obvallatis, jodo tinctis; sporidiis 58-60 × 38-40 primo hyalinis demum opace fuligineis, semper nudis.

Hab. in fimo vaccino prope Mendoza, Argentina.

3. *Ascobolus behnitziensis* Kirchst., Verh. Bot. Ver. Brandenburg, 5703 XLVIII (1906) p. 47. — Ascomatibus solitariis v. paucis aggregatis, primum globoso-clausis, dein apertis et acute marginatis, demum patentibus, extus brunneo-olivaceis, furfuraceo-striatis; disco primum concolori, demum obscure v. nigro-brunneo, usque 1 cm. diam.; ascis cylindræis, dein clavatis, pedicellatis, supra rotundato-operculatis, 160-200 × 14-20, octosporis; sporidiis monostichis

v. irregulariter distichis, primum pallide dein obscure brunneis
v. pallide dein obscure violaceis, ovoideis, reticulato-striatis, 15-
26 × 9-16; paraphysibus filiformibus, griseo-olivaceis, conglutinis.

Hab. in argillosis prope Gross-Behnitz Germaniæ. — Inter *A. carbonarium* Karst. et *A. atro-fuscum* Ph. et Pl. medius.

4. *Ascobolus striato-punctatus* Boud., Icon. Mycol. t. II, pl. 13 (1906) 5704
Hist. et Classif. Discomyc. Europe (1907) pag. 72. — Pro genere
medius, 2-5 mm. latus, luteo-virens dein subolivaceus, extus oli-
vaceo-furfuraceus, ascomatibus hemisphæricis dein convexis, disco
nigro-punctato; ascis majoribus, clavatis, 280-320 × 23-30, para-
physibus tenuibus ad apicem clavulatis 7-12 µ. cr. terminatis et
ut ascis in gelatina lutea immersis; sporidiis majoribus, fusiformi-
bus, violaceis, 30-35 × 12-13, striis simplicibus aut divisis longitu-
dinalibus et crebre punctatis ornatis.

Hab. ad terram argillaceam in silvis Montmorency, Gallia. —
Ascob. viridi affinis sed differt sporidiis striis tenuioribus magis
numerosis transverse punctulatis, præditis.

5. *Ascobolus mirabilis* Dangeard in Botaniste, X (1907) pag. 321, 5705
tab. 67-70. — Mycelio araneoso; ascomatibus immaturis sphæroi-
deis v. ovoideis initio clausis, supra glabrescentibus; ascis spori-
diisque nondum evolutis visis; quoad evolutionem ascogonii cfr.
Dang. l. c.

Hab. cultus in Agar in laboratorio botanico Poitiers. — Ipse
cl. auctor fatetur speciem genuinam non condidisse, sed tantum
dedisse nomen ad interim ut sua expositio bio-morphologica sub
nomine quodam militaret.

RUHLANDIELLA P. Henn. — Syll. XVII, p. 241. — Ex errore ca-
lami in Syll. l. c. inter Gasteromycetes locata, transferri debet ad
Discomycetes prope *Gymnodiscum* — Syll. VIII, p. 545.

Fam. 6. Dermateaceæ Fr.

Sect. 1. Hyalosporæ.

MIDOTIS Fr. — Syll. VIII p. 547 pp.

1. *Midotis Heinricherii* Bres., Ann. Mycol. V (1907) p. 242. — Ve- 5706
geta aurantiaca, carnoso-lenta; stipite communi crasso, rugoso, 2-3

cm. longo crassoque, sursum varie ramoso; ramis compressis, villosis, in cupulas auriformes vel spathulatas, profunde lobato-incisas, abeuntibus; cupulis extus villosis, marginibus reflexis; hymenio levi; ascis clavatis, basi tortuoso-stipitatis, jodo haud tinctis, 100-110 \times 6-7; paraphysibus ramosis, 2 μ . crassis, apice incrassato, sæpe curvato, 3 μ . crasso; sporidiis ellipticis, hyalinis, 6-7 \times 3-3 $\frac{1}{2}$; contextu excipuli parenchymatico; pilis septatis, 100-250 μ . longis, basi 8-9 μ . crassis.

Hab. ad ligna in insula Java (HEINRICHER). — Totus fungus 7-8 cm. altus, 5-6 cm. latus habitu fere *Sparassis crispæ*; in vegeto aurantiacus, in alcohole luride luteus, trunco fuscidulo.

2. *Midotis americana* (Thaxt.) Sacc. et Trav. — Syll. XX, p. 92 — 5707

Wynnea americana Thaxt. Bot. Gaz. (1905) XXXIX pag. 246, tab. IV-V. — Sclerotio molli, subgelatinoso, in sicco coriaceo, irregulariter lobato, brunneo, circiter 50 \times 40 mm.; ascomatibus paucis v. usque ad 25, typice simplicibus raro multiplicibus, erectis, elongatis subauriculatis, magnitudine variabilibus circ. 130 \times 60 mm., margine subinvolutis, extus nigro-brunneis, minute verruculosis, margine subpilosis; disco æquali, rubro-purpureo v. brunneo; ascis elongatis 500-540 \times 18, octosporis; paraphysibus septatis simplicibus v. irregulariter ramosis, clavatis, apice brunneolis; sporidiis subcymbiformibus, 32-40 \times 15-16, utrinque apiculatis v. pillatis, granuloso-farctis et grosse subguttulatis.

Hab. ad terram in silvis, Burbank, East Tennessee et Craberry North Carolina America bor.

DERMATEA Fr. — Syll. VIII p. 550, XI p. 422, XIV p. 794, XVI p. 762, XVIII p. 122.

1. *Dermatea olivacea* Kirschst. Verh. Bot. Ver. Brandenb. XLVIII 5708

(1906) p. 40. — Ascomatibus e cortice cæspitose erumpentibus in stromate indistincto brunneolo insidentibus, primum clausis, globosis, dein hemisphærice apertis et discum obscure olivaceum ostendentibus, sessilibus, extus brunneo- v. viridi-pruinosis, firme ceraceis, 0,5 mm. circ. diam.; excipulo prosenchymatico, olivaceo; ascis clavatis, breviter pedicellatis, supra rotundatis v. obtuse conoideis incrassatulis, 90-100 \times 18-20, octosporis; sporidiis laxè distichis, oblongis, pluriguttulatis, basi acutatis, hyalinis, quadrilocularibus, 18-20 \times 8-9; paraphysibus ascos longitudine æquantibus, hyalinis v. chlorinis, filiformibus, ramosis, supra rotundatis, quandoque etiam clavatis.

Hab. in ramis dejectis Pruni domesticæ, prope Gross-Behnitz Germaniæ. — Gen. *Pezizulæ* Tul. forte adscribenda.

2. *Dermatea olivascens* Rehm, *Ascomycetes* exs. (1907) n. 1686, 5709
Ann. Mycol. V (1907) p. 80. — Ascomatibus dispersis, primitus immersis, per epidermidem prorumpentibus, plerumque solitariis, subglobosis, mox patellaribus marginatisque, demum disco convexulo, olivaceo-fusco, pulverulento, 0,5-1,5 mm. diam. in stipitem brevissimum elongatis, excipulo fuscidulo parenchymatice contexto, ceraceis; ascis clavatis, imprimis ad apicem crasse tunicatis, 150 × 20-25, octosporis; poro jodo violaceo-tincto; sporidiis ellipsoideis, utrinque subrotundatis, 1-cellularibus, guttam oleosam permagnam includentibus, hyalinis, 20-25 × 10-12, distichis; paraphysibus filiformibus, septatis, 2 µ. cr. et versus apicem ramosis et usque ad 4 µ. cr. fuscidulis, epithecium crassum formantibus; hypothecio crasso, flavido.

Hab. in ramis ? emortuis Cratægi spec., Mt. Pleasant Iowa Amer. bor. (F. J. SEAVER). — A *Derm. cratægicola* Dur. sporidiis multo minoribus diversa.

3. *Dermatea Rickiana* Rehm, *Ann. Mycol.* VI (1908) pag. 319. — 5710
 Ascomatibus sessilibus, rarissime solitariis, fere semper cæspitose aggregatis, demum in soros 1-2 cm. longos et latos plurimis artissime congregatis et complicatis, cyathoideis, ab initio globosoclausis, dein urceolatis, demum disco orbiculari explanato, crasse crenulato-marginato, alutaceo, interdum cinerescente, extus subgranulatis, 0,3-1,5 mm. diam., coriaceis, excipulo crasse prosenchymatico fusco, hyphis ad marginem discretis; hypothecio crasso, subfusco; ascis cylindraceis, apice subtruncatis ca. 80 × 5, octosporis, jodo immutatis; sporidiis cylindraceis, rectis, utrinque obtusis, unicellularibus, cum guttis oleosis duabus submagnis, hyalinis, 6 × 1,5, monostichis, rarius distichis; paraphysibus filiformibus, ca. 3 µ. crassis, obtusis, hyalinis, prominentibus.

Hab. ad culmum Guadua Taquaræ, parasitans in Rhopographo Taquaræ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (Rick S. J.). — *Cenangio helvolo* Jungh. proxima.

4. *Dermatea mycophaga* Masee, *Kew Bull.* (1910) p. 218. — Asco- 5711
 matibus sessilibus carnosius, aggregatis, mox applanatis, disco ferrugineo, extus glabrato, obscuro, 0,5 mm. diam.; ascis; sporidiis monostichis, ellipsoideis, hyalinis, glabris, eguttulatis, 5 × 3; paraphysibus filiformibus, sursum ramosis, brunneis.

Hab. in stromate vetustæ Xylariæ pr. Malacca (RIDLEY).

CENANGIUM Fr. — Syll. VIII p. 556, X p. 36, XI p. 423, XIV p. 795, XVI p. 763, XVIII p. 125.

1. *Cenangium heteropatelloides* Rehm, Contr. mycol. Hung. (Növ. 5712 Közl. 1905) p. 3, Extr. — Ascomatibus sparsis, sæpe binis sessilibus, primitus globoso-clausis, dein brevissime crasse stipitatis, disco urceolato, denticulato-marginato, nigro-purpureo, denique subpatellaribus crasseque marginatis, excipulo glabro, crasso, fusco-nigris, 0,25-1,5 mm. diam., ceraceis siccis sæpe gyroplicatis; ascis clavatis, apice obtuse acutatis, 36-45 \times 6-7, octosporis; sporidiis cylindraceis, rectis, 1-cellularibus, hyalinis, 6-8 \times 1,5, distichis; paraphysibus filiformibus, septatis, haud clavatis, dilute purpureis, subconglutinatis.

Hab. ad caules *Aconiti* in alpibus hungaricis (prof. LINHART). Margine primitus denticulato *Heteropatellæ* similis, ceterum plane diversa species.

2. *Cenangium rosulatum* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien, 5718 CXV Abt. I (1906) pag. 649, cum icon. — Ascomatibus 6-20 e cortice erumpenti-subconnatis, hemisphaericis, rosulas 4-6 mm. latis efformantibus, coriaceo-carnosulis ex umbrino fuliginosis, siccis nigricantibus, plus minus poculiformibus, 1-1,5 mm. diam., extus albo-pulveraceis, margine distincte albo-flocculosis; paraphysibus nullis v. paucis, filiformibus, hyalinis; ascis cylindraceis 70-110 \times 6-8, octosporis; sporidiis hyalinis, distichis, unilocularibus, subbotuliformibus, 10-14 \times 2-2,5, raro usque ad 20 μ . long. J-.

Hab. in ramulis putrescentibus *Salicis* purpureæ prope Tulln Austriæ inf. — *Cen. tryblidioidi* Ell. et Ev. affine a quo differt præcipue ascomatibus subconnatis. A *C. salicello* v. Höhn. et *C. Salicis* Schr. omnino diversum.

3. *Cenangium Pinastri* Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII 5714 (1906) L, pag. 13. — Ascomatibus sessilibus, cæspitosis, coriaceo-membranaceis, levibus, subfarinaceis, fuscis vel fusco-nigrescentibus, epidermide secedente superficialibus, difformibus, hymenio pallidiore, 2-5 cm. latis; ascis cylindraceis, circiter 160 \times 7-9; sporidiis monostichis, eguttulatis, rectis, 7-9 \times 4-5; paraphysibus filiformibus.

Hab. ad ramos aridos *Pini* silvestris prope Kuopio Fenniae (O. LÖNNBOHM). — *Cen. populneo* affine, sed differt ascomatibus minoribus, ascis sporidiisque diversis. *Cenangium populneum* (Pers.) Rehm, teste cl. Vogliano, Ann. R. Accad. Agricolt. Torino LII (1909) p. 284 est status ascophorus *Dothichizæ populeæ* Sacc. et Briard.

4. *Cenangium luteo-griseum* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 5715 CXVIII, Abt. I (1909) p. 379. — Ascomatibus coriaceis, sparsis v. paucis caespitose gregariis, breviter crasseque stipitatis, 1-2,5 mm. diam. primum globoso-clausis, dein apertis et subpatellaribus, margine albo v. flavidulo pilis hyalinis $80 \approx 2-3$ velutino, revolutis; disco flavo-sulphureo v. citrino, dein obscure flavo, extus leviter e griseo brunneo-cinereo; stratu hymeniali 50-55 μ . cr.; hypothecio 200-250 μ . cr. plectenchymatico, basi et stipite brunneolis subparenchymaticis; excipulo brunneolo; ascis cylindraceo-clavatis, sessilibus, supra obtusis, $48-53 \approx 4-5$, octosporis; paraphysibus filiformibus rigidis, 2 μ . cr. ascos subaequantibus; sporidiis distichis ex elongato cylindraceutis, plerumque curvulis, utrinque obtusulis, hyalinis, $5-7 \approx 1,7-2$. J.

Hab. in ligno duro rubro-brunneo Dicotyledoneæ cujusdam, Tjibodas in ins. Java. — Cum *Cen. chrysoprasso* Cooke et *Helotio discreto* Karst. comparandum.

5. *Cenangium fallax* Rick, Broteria III (1904) fasc. IV, pag. 288. — 5716 Ascomatibus gregariis, subsessilibus, coriaceis, 2-3 mm. latis, externis primitus albis, pruinatis, dein fulvis, disco-brunneo-fusco, griseo-pruinato; in subiculo griseo, dein fulvo insidentibus; margine subtumido, excedente; ascis cylindraceutis, gracilibus, $80 \approx 3$, stipitatis; sporidiis monostichis, hyalinis, ovoideis, biguttulatis, unilocularibus, $6 \approx 3$; subiculo etiam in speciminibus maturis bene evoluto et ascomata circumeunte.

Hab. in stromatibus et stipitibus Xylariæ cujusdam, Rio Grande do Sul, Brasilia. — *Cen. tahitensi* Pat. affinis species sed colore omnibus partibus albo-griseo et matrice satis diversa.

6. *Cenangium Umbellatarum* Ces. — Syll. VIII, p. 564 — var. *Cynanchi* Rehm, (Esterr. Bot. Zeitschr. LVI (1906) p. 343. — (Nomen nudum).

Hab. in caulibus *Cynanchi Vincetoxici*, Innschlucht supra Landeck, Austria.

TYMPANIS Tod. — Syll. VIII p. 578, X p. 36, XI p. 424, XIV p. 798, XVI p. 764, XVIII p. 127.

1. *Tympanis acerina* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5718 p. 4, Extr. — Ascomatibus primitus peridermio innatis, dein 4-10 arcte in caespitulos congregatis, per epidermidem laciniatim fissam prorumpentibus, globoso-clausis, dein patellaribus, disco orbiculari plano marginato, versus basim angustatis, 0,5-1 mm. diam., disco

udo cinereo-nigro, siccis atris, coriaceis; ascis cylindraceis, apice rotundatis, $120-130 \times 12-15$, jodo immutatis; sporidiis spermatoidis hyalinis, curvatis, $1,5 \times 1$, innumeris repletis (sporidiis ipsis nondum repertis); paraphysibus filiformibus, septatis, 2μ , versus apicem 3μ . cr. ibique flavidulis conglutinis; hypothecio fusciculo crasso.

Hab. in ramulo *Aceris campestris*, Berencsfalu, prope Selmezbánya, Hungariæ (KMET). — Hucusque nulla *Tympanis* in *Acere* descripta.

2. *Tympanis Myricariæ* Rehm, (Esterr. bot. Zeitschr. LVI (1906) 5719 p. 343. — (Nomen nudum).

Hab. in ramulis *Myricariæ germanicæ*, Pfitschertal, Austria.

Sect. 2. Phæosporæ.

PHÆANGIUM Sacc. — Syll. VIII p. 592, X p. 37, XI p. 424, XIV p. 798, XVIII p. 128.

1. *Phæangium Vogeli* P. Henn., Verh. Bot. Ver. Prov. Brandb. L 5720 (1908) p. 132. — Ascomatibus sparsis v. cæspitosis, erumpenti-superficialibus, coriaceis, primo clausis dein cupulatis, sessilibus, sulcato-rugosis, rufo-brunneis v. castaneis, pilis filiformibus, septatis, sæpe flexuosis, brunneis v. castaneis $100-250 \times 10-20$ vestitis, disco atro-fusco, levi, circ. $1-1,5$ mm. diam.; ascis cylindraceo-clavatis, vertice obtuse rotundatis, octosporis, $60-80 \times 4-5$; paraphysibus repetito-ramosis, filiformibus, apice vix incrassatis, guttulatis, hyalinis, c. 2μ . cr.; sporidiis oblique monostichis, ellipsoideis, biguttulatis, $7-9 \times 3,5-4$, fusco-atris; hypothecio ochraceo.

Hab. in trunco acerino prope Tamsel Germania (VOGEL).

2. *Phæangium sphæroides* Ell. et Ev. Bull. South Calif. Ac. of Sc. 5721 IV (1905) p. 62. — Gregarium; ascomatibus rotundis, nigris, levibus, primum globosis dein depressis obconicis, disco plano vel concavo, udis convexis, $\frac{1}{3}-\frac{3}{4}$ mm. diam., siccis margine incurvato; ascis cylindraceis, p. sp. $50-55 \times 4$; paraphysibus obscuris; sporidiis monostichis, oblongo-ellipsoideis, subopacis, $6-8 \times 3-4$.

Hab. in ligno dealbato *Rhamni* et *Rhois laurinae*, Arlon, Catalina Isl., California (C. F. BAKER).

HYMENOBOLUS Mont. — Syll. VIII p. 587.

1. *Hymenobolus Kmetii* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5722 p. 4, Extr. — Ascomatibus sparsis, primitus sub cortice exteriori nidulantibus, globoso-clausis, dein per peridermium elevatum varieque dilaceratum erumpentibus, excipulum irregulariter laciniatim apertis et discum patellarem orbicularem, demum sæpe lirellæformiter curvatum, fusco-nigrum denudantibus, extus fuscis, glabris, excipulo crasso parenchymatico, siccis corrugatis, 2-4 mm. long., c. 1 mm. lat.; ascis cylindræis, apice rotundatis, haud incrassatis, 4-sporis, $100-120 \approx 25$; sporidiis oblongo-globulosis, glabris, unicellularibus, haud guttatis, fuscis, $25 \approx 18$, strato mucoso lato obductis, 1-stichis; paraphysibus filiformibus, 2 μ ., ad apicem dilute fuscescentem 3 μ . cr., septatis, conglutinatis; hypothecio flavidulo.

Hab. in ramo emortuo *Quercus*, Berencsfalu, prope Selmezbánya, Hungariæ (KMET). — Species valde memorabilis a *Stictophacidio* excipulo multo crassiori paraphysibusque haud ramosis diversa.

Sect. 3. Didymosporæ.**CENANGELLA** Sacc. — Syll. VIII p. 587, X p. 37, XI p. 424, XIV p. 798, XVIII p. 127.

1. *Cenangella spiræicola* P. Henn. Hedw. XLV (1905) pag. 29. — 5723 Ascomatibus sparsis v. subaggregatis, erumpentibus, primo sub-turbinatis clausis, atris, dein subcupulatis, breve stipitatis, 400 μ . c. cr., coriaceis, striatulis, margine crenulatis, fimbriatis, contextu atro-olivaceo; ascis cylindræo-clavatis, obtusis, 8-sporis, $90-110 \approx 5-6$; paraphysibus filiformibus, hyalinis c. 1,5 μ . cr., apice paullo usque ad 2 μ . incrassatis, superantibus; sporidiis subdistichis oblonge fusoides, utrinque subacutiusculis, primo continuis, dein medio septatis, haud constrictis, $10-13 \approx 1,5-2$.

Hab. in ramis siccis *Spirææ*, Michailowskoe Rossicæ (Mosso-LOFF). — Habitus *Scleroderridis Spirææ* Rehm.

2. *Cenangella alnicola* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5724 p. 3, Extr. — Ascomatibus solitariis v. binis, primitus innatis, per peridermium laciniatim disruptum erumpentibus, primitus clausis, turbinatis, brevissime crasse stipitatis, dein disco urceolato, demum patelliformi, orbiculari, crasse marginato, nigro-fusco, extus gla-

bris, obscure fusco-ferrugineis, prosenchymaticis, ex hyphis intricatis fuscis contextis, 1-5 mm. diam., siccis complicatis; ascis clavatis, apice rotundatis, $75-80 \approx 7-9$, octosporis; sporidiis oblongis, utrinque obtusis, rectis vel subcurvatis, hyalinis, medio septatis, plerumque utroque apice breviter filiformiter appendiculatis (conidiferis), $9-10 \approx 2,5$, distichis; paraphysibus filiformibus, versus apicem sensim 3 μ . cr. et fuscidulis.

Hab. in cortice Alni incanæ, Hungaria (HAZSLINSZKY sub «Dermatea furfuracea» in herb.). — Species hungarica modo colore *D. furfuraceæ* similis, partibus internis plane divergit, imprimis sporidiis septatis. *Cenangella alnicola* Feltg. (1903) — Syll. XVIII, p. 128 — certe diversa est, sed quoad genus incerta, hinc nomen præsentis interim non mutandum videtur.

3. *Cenangella bambusicola* Rick, Broteria V (1906) p. 37. — Asco- 5725
matibus disciformibus, sessilibus, cartilagineis, duriusculis, primitus albidis, dein viridi-flavis, glabriusculis, 1 mm. latis, margine crasso involuto; ascis $70 \approx 9$; sporidiis fusiformibus, hyalinis, octonis, septatis (an spurie?), 20 μ . longis 4 μ . latis, guttulatis; paraphysibus filiformibus, versus apicem paulatim incrassatis, multiseptatis, fere hyalinis, epithecium densum formantibus, conglutinatis cum ascis.

Hab. in ramis vivis Bambusæ, Rio Grande do Sul Brasilæ.

Sect. 4. Phragmosporæ.

SCLERODERRIS Fr. — Syll. VIII p. 594, X p. 37, XI p. 425, XIV p. 799, XVI p. 765, XVIII p. 129.

1. *Scleroderris gigaspora* Masee, Kew Bull. (1910) p. 3, f. 1-5. — 5726
Ascomatibus gregariis, innato-superficialibus, cylindraceo-turbinatis v. e mutua pressione difformibus, sessilibus, extus sordide fuscis, glabris, disco concavo, 1 mm. diam.; ascis cylindraceis, sursum obtusatis, deorsum breviter tenuato-stipitatis, octosporis, $250-280 \approx 22-25$, paraphysibus tenuibus apice ramosis, hyalinis obvallatis; sporidiis vermiformibus, rectis v. leniter flexuosis, multiseptatis, hyalinis, $150-160 \approx 7-8$.

Hab. cæspitose in scutellis Mytilaspidis citricolæ ad folia Citri Aurantii, Trinidad Indiæ occid. (J. H. HART). — Affinis *Scl. seriata* et *Scl. virescenti* sed asci et sporidia multo longiora et habitatione diversa.

PHÆODERRIS Sacc. — Syll. VIII p. 599, XIV p. 32.

1. *Phæoderris Labiatarum* von Höhn., Österr. Bot. Zeitschr. LVII 5727 p. 323. — Ascomatibus innatis, sparsis, globoso-disciformibus, 400-500 μ . lat., 200 μ . alt. excipulo margine 40 μ . cr., lateraliter usque ad 120 μ . cr., ex cellulis 6-8-pluristratosi crasse tunicatis conflato donatis, extus atro-brunneis, ostiolo carentibus et laciniatim dehiscentibus; hypothecio 50 μ . cr.; ascis clavatis brevibus, stipitatis 90 \approx 9-10, octosporis; sporidiis pluriseriatis, brunneolis, fusoides, 6-cellularibus, medio constrictis, fere biconicis, 29-36 \approx 4-5,5; paraphysibus filiformibus copiosis.

Hab. in caulibus emortuis *Salviae glutinosæ*, Wienerwald Austriæ.

Sect. 5. Dictyosporæ.

DERMATINA Sacc. — Syll. VIII p. 492 (ut subgen.).

1. *Dermatina javanica* v. Höhn., Fragm. Mykol. IX in Sitzb. k. Ak. 5728 d. Wiss. Wien CXVIII, Abt. I (1909) p. 1519. — Ascomatibus tenaci-carnosis, subcoriaceis, solitariis v. paucis approximatis, in stromate pallido adnato insidentibus, flavo-ochraceis v. flavo-brunneolis, dein griseo-brunneis, usque ad 700-850 μ . latis, 400-600 μ . altis, supra depresso-convexis, vix marginatis, basi in pedicellum obscuriorem 160-230 μ . cr., 210-260 μ . lon. abrupte angustatis; stratu hymeniali circ. 140 μ . cr.; ascis clavatis; tunica 1,5 μ . supra usque ad 4 μ . cr. præditis, basi sensim stipitiformini nodulose-que angustatis, supra attenuatis, obtusiusculis, octosporis 90-140 \approx 16-21; J +; paraphysibus filiformibus apice sæpe breviter ramosis v. sensim usque ad 8 μ . claviformi-incrassatis, 1,5 μ . latis, flavo-guttulatis; sporidiis distichis, elongatis, apice rotundatis, plerumque diu unilocularibus, demum transverse 3-5-septatis, loculis mediis longitudinaliter uniseptatis, tenuiter tunicatis, hyalinis, demum flavidis, 22-28 \approx 8-10,5; hypothecio 130-160 μ . cr. flavo-ochraceo, parenchymatico; excipulo margine 20 μ . circ. cr. deorsum sensim usque ad 60 μ . cr. ex hyphis extus in pilos 20 \approx 9, 1-2-septatos abeuntibus; contextu pedicelli minute parenchymatico, supra plectenymatico.

Hab. in cortice arboris cujusdam in silvis Tjibodas in ins. Java.
— *Dermateæ eucritæ* Karst. affinis.

Fam. 7. Bulgariaceæ Fr.

Sect. 1. Hyalosporæ.

LEOTIA Hill — Syll. VIII p. 609, XVIII p. 131.

1. *Leotia punctipes* Peck, Bull. Torr. Bot. Club XXXIV (1907) p. 102. 5729

— Ascomate subgloboso, undulato, gyroso, lucido, obscure viridi, in sicco 4-8 mm. lato; stipite angusto 1,8-3 cm. longo, 1-3 mm. cavo, minute obscure viridi-punctato, viridulo- sed pileo pallidiori; ascis cylindraceis v. subclavatis; sporidiis oblongis, rectis v. curvulis, 15-20 \approx 5-6; paraphysibus filiformibus.

Hab. inter Sphagna, Stow Massachusetts Amer. bor. (S. Davis). — *Leot. chlorocephalæ* Schw. affinis.

2. *Leotia Batailleana* Bres., Fungi gall., Ann. Myc. vol. VI (1908) 5730

p. 47. — Ascomate globoso, levi, ceraceo, basi parva vallecula a stipite remoto, læte roseo, intus concolori sed strato ascorum aurantio-luteo, 2-3 mm. diam.; stipite farcto, ruguloso, glabro, dilute roseo extus intusque, 3-4 mm. longo, $\frac{1}{2}$ -1 mm. crasso; ascis clavatis, 105-114 \approx 6, jodo poro cærulescente; paraphysibus filiformibus, 1-1 $\frac{1}{2}$ μ . crassis, apice incrassato, 2-3 μ ., granulis fuscis repleto; sporidiis fusoides, uno latere subdepressis, crasse guttulatis, hyalinis, continuis, 20-30 \approx 3-4.

Hab. ad terram gregarie v. subcæspitose, Jura (FRID. BATAILLE).

— Specimina vetusta tantum vidi, sed ista vix dubie ascomate luteo-aurantio gaudent e strato ascorum ita colorato (Bresad. l. c.).

Leotia species dubiæ, in Syll. XIX, p. 1073 citatæ, sunt: *Leotia helvelloides* (Corda) et *Leotia Persoonii* (Corda).

SARCOSOMA Casp. — Syll. X p. 42, XI p. 427, XIV p. 804, XVI p. 771, XVIII p. 132.

1. *Sarcosoma godronioides* Rick, Broteria V (1906) p. 32. — Asco- 5731

matibus gregariis, ramosis, ex thallo membranaceo, atro oriundis, lageniformibus, gelatinosis, 1 cm. altis, $\frac{1}{3}$ cm. latis, stipitatis, in medio incrassatis, stipite et parte superiore angustioribus, apice extus striato et granulato, foramine minuto apertis; intus in cavitate sphaerica hymenium gerentibus; hymenio olivaceo 1 mm. cr.; ascis longissimis 14-18 μ . latis, paucis, octosporis; sporidiis hya-

linis v. olivascentibus, elliptico-fusoideis, apicibus acutatis, membrana reticulata, 30×15 ; paraphysibus fusciculis, longissimis, multiseptatis, filiformibus.

Hab. in ramulis deciduis Pini, Rio Grande do Sul Brasiliæ.

2. *Sarcosoma Wettsteinii* v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 5732

Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907), Extr. p. 31.

— Ascomatibus solitariis mycelio nigro-brunneo insidentibus, depresso-globosis, basi profunde depresso-plicatis, convexis, supra depresso-concavis, carnosus, margine tenui, nigro, piloso, involuto præditis, extus tomento brunneo-nigro ex hyphis violaceo-brunneis septatis, apice obtusis pallidioribus, 4-7 μ . cr. constituto; hypothecio 7 mm. cr., gelatinoso-carnoso, translucide cyaneo-albo, plectenchymatico; disco 700-750 μ . cr., supra rubro-violaceo, levi, 18 mm. lato; ascis longe cylindraceis, stipitatis, 600 \times 20, octosporis, tunica firma præditis, supra rotundatis, vix incrassatis; sporidiis supra monostichis, confertis, unilocularibus, hyalinis, crasse tunicatis, levibus, ellipsoideis utrinque attenuato-obtusis, 36-50 \times 16-18. J.

Hab. in caule emortuo lianæ cujusdam, prope Cerquina-Cesar, Sao Paulo, Brasilia.

3. *Sarcosoma orientale* Patouill., *Bull. Soc. Myc. de Fr.* XXV (1909) 5733

p. 3, tab. II, fig. 4. — Ascomate magno, pendulo, hemisphærico, inferne truncato, levi aut varie rugoso-plicato, tremelloso, sessili, extus atro-brunneo, minute furfuraceo, intus albido-fuliginoso; disco marginato, plano, orbiculari, pulchre aurantio-flavo; ascis cylindraceis, longissimis, 350-500 \times 20, octosporis, operculatis, paraphysibus elongatis, filiformibus, fasciculatis, apicem versus incrassatis (3-5 μ .), granulis aurantiacis repletis; sporidiis monostichis, hyalinis, ellipsoideis, magnis, 42-50 \times 16-18, crassiuscule tunicatis, verrucis obtusis parce obsessis.

Hab. in liana emortua ignota, in Valle Djirin Annam, 1600 m. alt. (EBERHARDT).

4. *Sarcosoma tetrasporum* von Höhnelt, *Ergeb. Bot. Exp. Südbras.* 5734

1901, Denk. k. Ak. d. Wiss. Wien. Bd. LXXXIII (1907), Extr. p. 32. — Ascomatibus solitariis, obconicis, conoideo-stipitatis, 2 cm. latis, 9 mm. altis, molli-gelatinosis, omnino rubro-violaceis, hypothecio 8 mm. cr. ex hyphis plectenchymaticis constituto, violaceo-rubidis, margine tenuioribus; stipite basi velutino, ascomate vero glabro, basi extus ruguloso, ceterum levi; paraphysibus numerosis, filiformibus, 2-3 μ . cr., supra quandoque incrassatis; ascis tunica firma præditis, supra obtusatis, cylindraceis, basi sen-

sim in stipitem attenuatis, 380-400 \times 12-16, 2-3- sed plerumque 4-sporis; sporidiis monostichis, hyalinis, crasse tunicatis, ellipsoideis, sæpe uno latere depressis, guttulatis, unilocularibus, 18-26 \times 12-13. J -.

Hab. in ligno putri, Morro da Senhora prope Iguape, Sao Paulo Brasilia.

OMBROPHILA Fr. — Syll. VIII p. 613, X p. 38, XI p. 425, XIV p. 801, XVI p. 766, XVIII p. 133.

1. **Ombrophila tamseliana** P. Henn., Verh. bot. Ver. Prov. Brandb. 5785 L (1903) p. 133. — Ascomatibus foliicolis sparsis v. gregarie cæspitosis, breve stipitatis, primo subturbinatis, clausis, dein cupulatis undulatis, marginatis, castaneis, levibus, disco castaneo, 1,5-2 mm. diam., stipite breviter cuneato c. 1 \times 0,5 mm., atro-brunneo; ascis clavatis, apice obtuse rotundatis, octosporis, 80-110 \times 6-8; paraphysibus filiformibus vix incrassatis, hyalinis; sporidiis fusoides, utrinque subacutis, rectis v. curvulis, 2-4-guttulatis, oblique mono-v. subdistichis, hyalinis, 12-15 \times 3,5-4.

Hab. in foliis putrescentibus Betulæ prope Tamsel Germania (VOGEL). — Colore nec non sporidiis elongato-fusoides curvulis distincta.

2. **Ombrophila Exidia** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 453. — Ascomatibus subsessilibus subtenuibus, extus intusque laxè ruguloso-costulatis, concavis, fuligineis, glaberrimis, udis subtremelloideis et subpellucidis, siccis subcorneis, majusculis, 5-25 mm. diam., margine acuto integro involuto; ascis linearibus, jodo vix cærulescentibus, dense paraphysatis, apice rotundatis, longe tenuato-pedicellatis, 400-500 \times 15-20, octosporis, paraphysibus fumosis septulatis, 4-5 μ . cr.; sporidiis ellipsoideis in parte sup. ascis constipatis, utrinque rotundatis, 14-16 \times 7-8, rectis v. lenissime inæquilateris, eguttulatis, hyalinis.

Hab. ad ramulos aridos putres in insula Santiago prope La Plata, Argentina (C. MARELLI).

3. **Ombrophila hirtella** Rehm, Ann. Mycol. VI (1908) pag. 314. — 5787 Ascomatibus gregariis, sessilibus, lenticularibus, primitus clausis, dein patellaribus, disco plano, orbiculari, marginato, cinereo, excipulo fusco, hyphis simplicibus, septatis, rectis, fuscis, ca. 60 \times 5-6, versus basim excipuli subhyalinis obtectis, usque ad 4 mm. diam., siccis involutis, subgelatinosis; ascis clavatis, apice rotundatis, 55-60 \times 5-6, jodi ope cærulescentibus, octosporis; sporidiis fusoides,

rectis vel curvatis, 1-cellularibus sine guttulis, hyalinis, 7-8 \approx 2,5-3, monostichis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr.

Hab. in ligno putri, Glencoe, Illinois Amer. bor. (E. T. et S. A. HARPER) — Licet pilosula, imprimis reactionis jodicæ causa, potius *Ombrophila* quam *Lachnea*.

4. *Ombrophila Kmetii* Rehm, Contr. mycol. Hung. (Növ. Kö-l. 1905) 5738
p. 5, Extr. — Ascomatibus dispersis, sessilibus, primitus globoso-clausis, dein urceolatis, demum patellaribus, crasse marginatis, in stipitem brevissimum crassum elongatis, glabris, subferrugineis, 3 mm. d., gelatinoso-ceraceis; ascis cylindraceis, apice rotundatis, 120-130 \times 5-7, octosporis, poro jodo tinctis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttas 2 oleosas magnas includentibus, inde fere 2-cellularibus, hyalinis, 1-stichis, 8-10 \approx 3,5-5; paraphysibus filiformibus, hyalinis, 1 μ . ad apicem 2 μ . cr.; excipulo crasso parenchymatico.

Hab. in Polyporo obliquo sessilis, Berencsfalu prope Selmeczbánya, Hungaria (KMET). — Quoad habitum et colorem *Helotii* similis species, ab *Ombrophila firmula* (Roll.), quæ etiam Polyporum incolit, colore, ascis cylindraceis sporisque oblongis, hæud fusiformibus plane differt.

ORBILIA Fr. — Syll. VIII p. 621, X p. 39, XI p. 426, XIV p. 802, XVI p. 767, XVIII p. 137.

I. *Eu-Orbilia*: paraphysibus apice capitulatis.

1. *Orbilia mollisioides* v. Höhn., Fragm. Mykol. (1909) IX, in Sitzb. 5739
k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1521. — Ascomatibus superficialibus-epiphyllis in maculis 1-10 mm. latis, irregulariter rotundatis, pallidis modice gregarie insidentibus, primum flavo-brunneis obscurius marginatis, depressis, siccis obscure brunneis, incurvatis, 120-230 μ . latis, rotundatis, basi usque ad 65-85 μ . angustatis, ibique rotundatis, obscure brunneis, marginatis; contextu basi tenuiter plectenchymatico; excipulo parenchymatico; ascis clavatis, breviter pedicellatis, supra rotundatis v. parum conoideo-angustatis, octosporis, 44-56 \approx 6-8; paraphysibus filiformibus 1,5-2 μ . cr. supra conoideo-globosis et 4 μ . cr. et epithecium efformantibus; sporidiis mono- v. distichis, hyalinis, unilocularibus, elongato-fusoides, apice obtusulis, rectis v. vix incurvatis, 8-12 \approx 1,5-2. J +.

Hab. in foliis putrescentibus *Quercus rubra*, Kurpark in Schandau Saxonia (KRIEGER, Fungi saxon. n. 1997).

2. *Orbilia botulispora* v. Höhnelt, Fragm. z. Mykol. Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 131, — Ascomatibus gregariis, late adnatis, depressis, margine revolutis, vitellinis, siccis flavo-ochraceis, aquoso-carneis, 0,3-1,4 mm. latis et usque ad 400 μ . crassis; hypothecio bistratoso; excipulo parenchymatico ad marginem cellulis minutis prismaticis constituto; paraphysibus tenuissimis, supra usque ad 3 μ . globoso-incrassatis, flavis; ascis basi cylindraneo-cuneatis, 30-36 \times 2,5-3, octosporis; sporidiis plerumque monostichis, allantoideis, subcirculariter incurvatis, 2-3 \times 1.

Hab. in ligno fagineo putri prope Rekawinkel Austriæ inf.

3. *Orbilia aurantio-rubra* Boud., Icon. mycol. t. III (1906) pl. 464, Hist. et Classif. Discomyc. Europe (1907) p. 103. — Pro genere media 0,5-2 mm. lata, intus et extus aurantio-miniata; cupulis primo regularibus, dein plus minusve undulatis, levibus; ascis cylindraceis, ad basim attenuatis, ad apicem truncatis, octosporis, 60-80 \times 5-6; paraphysibus ad apices clavato-capitatis, 5-7 μ . cr., albis, intus guttulatis; sporidiis hyalinis, elongatis, cylindraceis sed varie undulatis et tunc vermiformibus, 15-18 \times 2.

Hab. ad corticem Ulmi, Marne, Gallia.

4. *Orbilia crenulato-lobata* von Höhnelt, Ergeb. Bot. Exp. Südbas. 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. pag. 31. — Ascomatibus superficialibus, sparsis, albo-translucidis, cartilagineis; membranaceo-firmis, 1-3 mm. latis, primum cupulatis dein expansis et margine involutis, levibus, 200 μ . diam., hyphis rugulosis tenuibus, hyalinis 5-6 μ . crass. basi adhærentibus ceterum glaberrimis, margine processibus confertis, 70-80 μ . alt. pluri-stratosi ex cellulis rotundis 4-5 μ . diam. formati præditis; disco 12-16 μ . cr. (immature); ascis circ. 3 μ . cr.; paraphysibus filiformibus, supra inflatis; sporidiis verisimiliter minutis allantoideis; contextu 80 μ . cr., parenchymatico.

Hab. in cortice putri ad flumen Rio Branco prope Conceição Sao Paulo, Brasilia. — *O. sinuosæ* Penz. et Sacc. affinis.

II. *Hyalinia* (Boud.): paraphysibus apice æqualibus.

5. *Orbilia inflatula* Karst. — Syll. VIII, p. 627 — *Hyalinia inflatula* (Karst.) Boud. Disc. p. 104. — var. *Lonicerae* Rehm in Strasser Verh. k. k. zool. bot. Ges. Wien LX (1910) p. 472. — Ascomatibus gregariis,

in ligno denudato sessilibus, primitus globosis dein patellaribus, margine acuto tenuissimo cinctis, 0,2-0,7 mm. diam., intus glabris, dilute hyalino-lutescentibus, disco demum pallidiore, excipulo prosenchymatico, hyalino, subgelatinoso, hyphis 4 μ . latis, siccis subconvolutis; ascis clavatis, apice rotundatis, 20-25 \times 4, octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, subcurvatis, 1-cellularibus, utrinque 1-guttulatis, hyalinis, 5-7 \approx 1-1,2; paraphysibus filiformibus 2 μ . cr. haud clavatis, hyalinis.

Hab. in ramo decorticato *Lonicerae*, Ybbsitz Austria inf. (P. LAMBERT).

6. *Orbilia nostra* (Rehm) Sacc. et Trott., *Hyalinia nostra* Rehm, Ann. 5744 Mycol. IV (1908) pag. 117; Ascom. exsicc. fasc. 41, n. 1754. — Ascomatibus dispersis, sessilibus, globulosis, dein patellaribus, tenuissime marginatis, hyalino-flavidulis v. subaureis, extus glabris, 100-150 μ . diam., excipulo tenuissimo parenchymatice contexto, membranaceis, siccis vix visibilibus; ascis clavatis, versus apicem subacutatis incrassatisque, 45-50 \times 12, octosporis, J +; sporidiis oblongis, utrinque rotundatis, rectis, subconstricto-didymis, unilocularibus, utrinque guttam oleosam v. guttulas plurimas continentibus, an demum bilocularibus; hyalinis, 10-12 \times 4, distichis; paraphysibus perpaucis, filiformibus, obtusis, hyalinis, 3 μ . cr.

Hab. ad acus recenter delapsos *Laricis japonicæ* in horto Neufriedenheim Monacensi Bavaricæ (REHM).

7. *Orbilia sericea* P. Henn., Hedw. (1905) XLV, p. 29. — Ascomatibus dense gregariis, primo clausis, dein applanatis subdiscoideis vix marginatis, undulatis, sessilibus, membranaceo-subgelatinosis, levibus, pallidis v. subisabellinis, sericeis 300-350 μ . c. cr.; ascis cylindraceo-clavatis, obtusis, 8-sporis, 18-22 \times 3; paraphysibus filiformibus, hyalinis, c. 0,5 μ . cr.; sporidiis subdistichis v. oblique monostichis, fusoides, hyalinis, continuis, 4-5 \approx 0,5.

Hab. in ligno putri, Michailowskœ Rossicæ.

8. *Orbilia breviasca* P. Henn., Verh. Bot. Ver. Prov. Brandenb. L. 5746 (1908) p. 132. — Ascomatibus lignicolis, superficialibus, sparsis, primo clausis, dein angulato-discoideis, marginatis, gelatinosis, flavo-aurantiacis, 1-1,5 mm. diam., disco concolori, levibus; ascis brevibus clavatis, apice obtuse applanatis, octosporis, 20-25 \times 3-3,5, paraphysibus filiformibus, hyalinis, c. 0,5 μ . cr., apice haud incrassatis; sporidiis subdistichis v. subtristichis, cylindraceis, subfusoides, utrinque obtusis v. subacutiusculis, rectis, hyalinis, 6-7 \times 0,5.

Hab. in ligno putri prope Tamsel, Germaniæ (VOGEL). — O.

luteo-rubellæ (Nyl.) Karst. affinis, a qua differt ascis brevioribus apice non incrassatis, paraphysibus sporidiisque angustioribus etc.

9. *Orbilia crenato-marginata* (v. Höhn.) Sacc. et Trott., *Hyalinia crenato-marginata* v. Höhn., Fragm. zur Mykol., III, Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 132. — Ascomatibus superficialibus, gregariis, tenuissimis, depressis, subhyalinis, flavido-albis, siccis pallide roseis, rotundatis, 320-630 μ . latis, basi lata insidentibus; excipulo tenui parenchymatico, cellulis 8-12 μ . latis ad marginem minoribus; margine denticulato-piloso; ascis octosporis, clavatis, sessilibus, 25 \times 3-4; paraphysibus simplicibus filiformibus, 1-2 μ . crassis, apice depresso capitellatis; sporidiis hyalinis, breviter filiformibus, vermiformibus, subclavulatis, 6-8 \times 0,5-1.

Hab. ad truncos putres, Wienerwald Austriae inf.

10. *Orbilia albo-marginata* Rehm, Österr. Bot. Ztschr. LVI (1906) p. 344 (Nomen nudum).

Hab. in caulibus emortuis Aconiti, Schrofenspass, Tirolia Austria.

PTEROMYCES B. R. S. in Saccardo, Not. Myc. VI, Ann. Myc. III (1905) p. 507 (Etym. *pteron* ala et *myces*). — Ascomata perexigua, depresso globulosa, tenuissime carnosula, pallide colorata, supra circulariter dehiscencia et discum (nucleum?) pallidiorem ostendentia; excipuli contextu tenuissime pseudoparenchymatico, margine subintegro non reflexo nec vere distincto. Asci e basi fasciculati, clavulati, subsessiles, octospori, paraphysibus bacillaribus cincti. Sporidia ovoidea, continua, hyalina, minuta. — Genus pulchellum *Orbiliae* et *Pezizellæ* subaffine sed ascomate diu (ut videtur) urceolato et margine proprio carente nec non habitatione peculiari statim dignoscitur. Inter Bulgariaceas prope *Orbiliam* interim locandum.

1. *Pteromyces ambiguus* B. R. S. in Saccardo, l. c. p. 508. — Ascomatibus dense gregariis v. confertis, depresso-globosis, perexiguis, 70-100 μ . diam., e fulvescenti dilute roseis, glabris, sessilibus, initio subcuticularibus, disco pallidiore, contextu laxiuscule et tenerime celluloso, fulvo-rubescens; ascis ex obovoideo demum clavulatis, basi breve tenuatis subsessilibus, apice rotundatis integris non foveolatis, 18-22 \times 7-8, octosporis; paraphysibus bacillaribus, sursum tenuiter clavulato-incrassatis, saepe curvatis ascum paullo superantibus; sporidiis distichie, ovoideis, hyalinis, intus farctis, 3-4 \times 1,5-2, extra ascos 6 \times 3.

Hab. sub cuticula v. membranula caulis pennarum subputrescentium Phasiani, La Panne, Furnes, Martio 1904 (MARIA ROUSSEAU). — Socia adsunt *Phoma pterophila* (Cfr. infra) et *Fusarium gallinaceum* Cooke et Harkn.

GLEOCALYX Masee — Syll. XVIII, p. 132.

1. *Gleocalyx rufa* (Schw.) Sacc. — Syll. VIII, p. 638 (*Bulgaria*) — 5750
var. *magna* Peck, N. York State Mus. Bull. n. 105 (1905) p. 31.
— Ascomatibus majusculis, 7-10 mm. diam., sessilibus, subplanis, subinde irregularibus v. undulatis, basi lata tempore udo strato gelatinoso albido inserta, disco ochraceo-brunneo; sporidiis hyalinis, 20-30 \approx 12.

Hab. ad terram inter folia Abietis et muscos North Elba Amer. bor. — Excipulum extus venoso-subreticulatum ut in typo. Ob sporidia hyalina a gen. *Bulgaria* desciscit.

HÆMATOMYCES B. et Br. — Syll. VIII p. 633, X p. 40.

1. *Hæmatomyces eximius* Rick, Broteria V (1906) p. 28. — Asco- 5751
mate gelatinoso, cerebriformi et tremelloideo, prorumpente, convolutionibus crassis, firmis, globoso, 5 cm. diam., castaneo; ascis cylindraceis, 130 \approx 6-8; sporidiis ellipsoideis, 6-8 μ . longis, 4 μ . cr., biguttulatis, apiculatis v. etiam apice truncatis, viridulo-hyalinis, dein olivascens, biserialibus, unilocularibus; paraphysibus filiformibus, apice paulatim minute incrassato, hyalinis, versus pedem viridulo-olivaceis.

Hab. ad truncum putridum, Rio Grande do Sul Brasilæ. — *Hæmat. spadiceo* affinis.

Sect. 2. Phæosporæ.

BULGARIA Fr. — Syll. VIII p. 636, X p. 41, XIV p. 804, XVI p. 770, XVIII p. 140.

1. *Bulgaria pusilla* Syd., Ann. Mycol. VIII (1910) pag. 40. — Ple- 5752
rumque sparsa, e cortice erumpens, breve crasseque stipitata, stipite ca. 1-2 mm. alto et crasso, primitus obovoidea et clausa, dein aperta dilatato-turbinata, orbicularis, glabriuscula, atra, 2-5 mm. diam.; ascis anguste clavatis, basi stipitiformi-attenuatis, 70-110 \approx 8-11, octosporis; sporidiis oblique monostichis, oblongis, utrinque

leniter attenuatis, continuis, primo hyalinis, dein olivaceo-brunneis, $17-20 \times 5-6\frac{1}{2}$; paraphysibus numerosis, hyalinis, filiformibus.

Hab. ad corticem, Pauai 2100 m. alt., provincia Benguet, Luzon, ins. Philipp. (R. C. Mc GREGOR et E. D. MERRILL). — *Bulgaricæ turbinatæ* affinis sed asci et sporidia multo angustiora.

BULGARIELLA Karst. — Syll. VIII p. 638, XVIII p. 131.

1. *Bulgariella argentinensis* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 454. — Ascomatibus parvis, sessilibus, e turbinato patellaribus, atro-vinosis, subiculo parcissimo radiante insidentibus, 2-5 mm. diam., eximie marginatis, hyphis radiantibus fuliginis pellucidis, $100-1500 \times 10-15$, parce ramulosis septulatis basi cinctis, disco vinoso, udis subgelatinosis, siccis subcorneis; ascis linearibus paraphysatis apice subtruncato-rotundatis, deorsum tenuato-pedicellatis $75-80 \times 5$, octosporis; sporidiis ellipsoideis, fuliginis, grosse 2-guttulatis, minutis, 8×4 , recte monostichis, utrinque obtusissimis, sæpe medio leuissime coarctatis.

Hab. ad truncos emarcidos mucidos in silvis secus Rio Colorado, prov. Jujuy, Argentina.

VOELTZKOWIELLA P. Henn. in Voeltzkow Reise Ostafrika III (1908) pag. 31 (Etym. a cl. prof. ALFR. VOELTZKOW, viatore Afric.). — Mycelium gelatinoso-membranaceum, effusum ex hyphis coloratis septatis consistens; ascomata gelatinoso-carnosa, cupulato-discoidea, sessilia superficialia; asci cylindraceo-clavati, octospori; paraphyses filiformes, ramosæ, coloratæ; sporidia ellipsoidea, continua, colorata. — Gen. *Sarcosomati* et *Bulgaricæ* affine sed differt mycelio gelatinoso et ascomatibus superficialibus.

1. *Voeltzkowiella madagascariensis* P. Henn., l. c. pag. 31, tab. III, fig. 26. — Mycelio membranaceo-gelatinoso effuso, ex hyphis septatis, ramosis, brunneis, c. $4-6 \mu$. cr. consistente, conidiis fuscis, ovoideis v. ellipsoideis, $6-7 \times 4-5$; ascomatibus superficialibus subgelatinosis, cupulato-planis, marginatis, extus pallido-fuscescentibus, levibus, disco plano, fusco-brunneo, c. 2 cm. longo, 1 cm. lato, 2 mm. cr., carne pallida gelatinosa; ascis clavatis, vertice obtuso-rotundatis, octosporis, $100-140 \times 15-20$; paraphysibus filiformibus hyalinis $3,5-4 \mu$. cr., ad apicem ramosis, septatis, fusco-brunneis, intus nubilosis, $8-15 \times 7-8$.

Hab. ad ramos arborum, Andranohinaly Madagascar.

paraphysibus filiformibus, 1 μ ., apice bifurcatis et globulosis 4 μ . crassis, epithecium crassum sanguineum formantibus; hypothecio hyalino.

Hab. ad ligna Coniferarum, Sumner Wash. Amer. bor. (E. T. et S. A. HARPER). — Ob excipulum tantum basilare ad *Agyrium* vergit.

DIDYMOCORYNE Sacc. et Trott. (Etym. *didymos* duplex et *Coryne* ob sporidia bilocularia). — A gen. *Coryne* differt sporidiis æque hyalinis sed tantum bilocularibus. Ad hoc genus quoque ducendæ sunt: *Didymocoryne striata* (E. et E.) — Syll. VIII, p. 643 — *D. solitaria* (Rehm) — Syll. X, p. 43 — *D. pallidula* (Rehm) — Syll. l. c. p. 44.

1. *Didymocoryne michailowskoensis* (P. Henn.) Sacc. et Trott., Co- 5762
ryne michailowskoensis P. Henn. Hedw. (1905) XLV, p. 30. — Ascomatibus sparsis v. subgregariis, stipitatis, calyciformi-infundibuliformibus, subgelatinosis sicco corneis, olivaceis, extus flavo-viridulis pulverulentis, margine sublobatis v. undulatis, c. 2-3 mm. diam., disco olivaceo, flavo-pruinoso, dein rimoso, stipitibus c. 1-4 mm. longis, 1 mm. cr., concoloribus, sæpe confluentibus; ascis clavatis, apice attenuatis obtusiusculis, 8-sporis, 80-100 \times 5; paraphysibus filiformibus, hyalinis, guttulatis, c. 2 μ . cr., apice paullo incrassatis; sporidiis oblongo-cylindræis, rectis v. curvulis, utrinque obtusis, 2-guttulatis, dein medio 1-septatis, hyalinis, 8-13 \times 2,5-3.

Hab. in ligno putri Michailowskoe Rossicæ (J. KONOVALOFF).

Sect. 4. Phragmosporæ.

CORYNE Tul. — Syll. VIII p. 641, X p. 43, XI p. 427, XVI p. 773, XVIII p. 143.

1. *Coryne gelatinosa* (Ell. et Mart.) Rehm, Ann Mycol. V (1907) 5763
p. 518. Ita vocanda *Orbilina gelatinosa* (Ell. et Mart.) Sacc. Syll. VIII, p. 624, Cfr. Ell. et Martin sub *Mollisia* (Amer. Nat. 1883, p. 1283). — Ascomatibus in mycelio orbiculari *Meliolæ* hyphis tenerrimis hyalinis ramosis obtecto indeque fere sericeæ cinerello dispersis, sessilibus, primitus globulosis, clausis, dein disco urceolato, demum patellari, tenuiter marginato, versus basim stipitifor-
miter elongatis, glabris, 0,3-0,5 mm. diam., hyalinis vel dilutissime rosaceis, gelatinosis, siccis rubidulis, fere corneis, excipulo ex

hyphis gelatinosis, candidis, septatis, implexis contexto, crasso; ascis clavatis, apice rotundatis, $50 \approx 12-15$, 8-sporis, jodi ope nulla; sporidiis fusiformibus, transverse 3-septatis, haud constrictis, hyalinis, $12-15 \approx 5$, distichis; paraphysibus gelatinosis, filiformibus, septatis, $3-3,5 \mu$. cr., ad apicem dilatatae 5μ . cr., curvulis.

Hab. ad folia viva Perseæ palustris, Green Cove Springs, Florida (MARTIN). — Genuina *Coryne* nec *Orbilina*.

2. *Coryne foliacea* Bres. in Strasser III, Nachtr. Pilz. Sonntagb. in 5764
Verhandl. zool. bot. Gesell. Wien (1905) p. 611. — Ascomatibus subcartilagineo-gelatinosis, e basi communi oriundis et caespitose congregatis e subturbinato subcyathoides v. foliaceis, demum late expansis, carneo-ochraceis, extus subrugulosis, usque ad 3 cm. latis; hymenio pallide carneolo, undulato-gyroso; ascis subcylindraceis, basi tenuato-stipitatis, $100-110 \approx 8-10$, jodo poro vix caerule-scentibus, paraphysibus $2,5 \mu$. cr., apice haud incrassatis interdum conidiophoris; sporidiis ellipsoideis, biguttulatis, hyalinis, $7-10 \approx 4-4,5$; conidiis vix a sporidiis diversis.

Hab. ad truncos Aceris Pseudoplatani in Mt. Sancto, Sonntagberg Austriae. — Habitus *Tremellæ foliaceæ*, sed fabrica interior omnino diversa.

3. *Coryne albido-aurantiaca* Starb. (1899) — Syll. XVI, p. 774 — 5765
Hujus speciei videtur status nondum maturus *Ombrophila geralensis* P. Henn. (1899) — Syll. XVI, p. 766.

CHLOROSPLENIELLA Sacc. — Syll. VIII p. 645, XVI p. 774.

1. *Chlorospleniella collematoides* Rehm, Broteria V (1906) p. 227. 5766
— Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculari, convexiusculo, haud conspicue marginato, dilute fuscidulo, c. 400μ . diam., excipulo versus basim coarctato, brunneo, glabro, ad basim pseudoparenchymatice contextu, siccis nigro-fuscis, disco tenuissime marginato, gelatinosis; ascis clavatis, apice rotundatis, $60-65 \approx 8-9$, J +, octosporis; sporidiis fusoideis, modice septatis, haud constrictis nec guttatis, rectis, interdum subcurvatis, $10 \approx 3$, hyalinis, strato mucoso tenuissimo obductis, distichis; paraphysibus, parvis, filiformibus, hyalinis. $1,5 \mu$. cr.

Hab. ad lignum putridum arboris frondosæ, Brasilia (RICK).

Sect. 5. Dictyosporæ.

HÆMATOMYXA Sacc. — Syll. VIII p. 633, X p. 40.

1. *Hæmatomyxa bambusina* Raciborski, Bull. Ac. Sc. Cracovie (1909) 5767 p. 371. — Hypothallo nullo v. subnullo; ascomatibus nigris, depressis 1-3 mm. latis, 1-1,5 mm. altis conflendo 5-6 angulosis, raro rotundatis, extus nigro-carbonaceis, intus albis, gelatinosis, hygroscopticis, pseudoparenchymaticis et prosenchymaticis, demum superficie hinc inde v. undique fertilibus; ascis pulvinatim erumpentibus, elongato-ovoideis, 90-98 × 20-24, apice rotundatis, octosporis; sporidiis ovoideis rotundato-attenuatis, levibus, hyalinis, 27-30 × 13-15, muriformi-multilocularibus, medio constrictulis, tenuiter tunicatis.

Hab. ad culmos *Bambusæ* sp., Buitenzorg Java.

Sect. 6. Scolecosporæ.

HOLWAYA Sacc. — Syll. III p. 646, XVI p. 1115.

1. *Holwaya pusilla* Rehm, Ann. Mycol. IV (1906) p. 337. — Asco- 5768 matibus in ligno superficialiter fusco-nigritulo dispersis, sessilibus, primitus subgloboso-clausis, dein patellaribus, tenuissime marginatis, 300-μ. altis et latis, in stipitem brevissimum c. 145 μ. lat. subcylindraceum elongatis, glabris, atris, siccis subverruculosis; excipulo flavo-fusco, hyphis laxè intricatis contexto, subgelatinoso, crasso; ascis cylindraceis, apice rotundatis, 120-130 × 8-10, octosporis, jodi ope nulla; sporidiis cylindraceo-vermicularibus, apice superiore obtusis, inferiore acutatis, subcurvatis, 1-5-septatis, quaque cellula magniguttata, haud constrictis, hyalinis, 35-38 × 3-3,5, distichis; paraphysibus filiformibus, 1 μ. cr., ad apicem dichotomis et fuscis, epithecium crassum formantibus.

Hab. ad lignum putridum in silvis, Lyndonville N. Y., Amer. bor. (C. E. FAIRMAN). — *Holwayæ giganteæ* proxima sed multo minor.

Fam. 3. Stictidaceæ Fr.

Sect. 1. Hyalosporæ.

PROPOLIS Fr. — Syll. VIII p. 648, X p. 44, XIV p. 806.

1. **Propolis pirina** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) p. 3, 5769

Extr. — Ascomatibus gregariis, sub epidermide innatis, eamque hemisphærice protuberantibus, demum laciniis 3-4 disrumpentibus, primitus globoso-clausis, dein disco orbiculari, tenuiter irregulariterque marginato, explanato, hyalino, 0,5 mm. diam., excipulo membranaceo, tenuissimo, fuseidulo, parenchymatico; ascis cylindraceis, apice rotundatis, 120-150 \approx 12-15, octosporis, jodi ope nulla; sporidiis fusoido-ellipsoideis, crasse tunicatis, 1-cellularibus, hyalinis, levibus 18-20 \approx 8-9, 1-stichis; paraphysibus filiformibus, 2 μ . cr., ad apicem dilutissime flavidulis.

Hab. in cortice Piri Mali, Berencsfalu, prope Selmeczbánya, Hungariæ (KMET). — A genere *Propolis* paraphysibus filiformibus, ab *Ocellaria* item paraphysibus haud ramosis neque epithecium formantibus, ascis Jodi ope diversa, tamen *Propoli fagineæ* structura similis, etsi ascomatibus orbicularibus sporarumque forma dissimilis.

2. **Propolis tetraspora** Sacc. apud Mouton, in Bull. Soc. bot. Belg. 5770

(1887) p. 2, t. I, f. 11, extr. — Ascomatibus dense sparsis, primo epidermide denigrata tectis, dein ea lacerata circumdati e discoideo oblongis 0,5-1 mm. long., rufo-succineis, carnosulis, immarginatis, planiusculis; ascis subcylindricis in pedicellum longiusculum protractis, tetrasporis, 80-90 \approx 10-12; paraphysibus septatis, ramosis, ascos æquantibus; sporidiis monostichis ellipsoideis, inæquilateris, quandoque subreniformibus, 2-guttulatis, granulosisque, hyalinis, 14-20 \approx 8-10.

Hab. in caulibus siccis Solidaginis Virgæ-aureæ, Chaudfontaine, Dolembreux pr. Liège Belgii. — Ab affinibus ascis tetrasporis potissimum distincta.

NÆVIA Fr. — Syll. VIII p. 658, X p. 45, XI p. 660, XI p. 631, XVI p. 1065, XVIII p. 594.

1. **Nævia pezizelloides** Rehm, Ascom. exsicc. n. 1657 (1906), Ann. 5771

Mycol. IV (1906) p. 405. — Ascomatibus dispersis, primitus sub epidermide innatis eamque perforantibus, demum sessilibus, patellaribus, disco orbiculari plano tenuiter marginato, excipulo glabro, versus basim subangustato, prosenchymatice flavidule contexto, hyalino-flavidulis, c. 300 μ . diam., siccis urceolatis, interdum fuscidule marginatis; ascis clavatis, apice rotundatis, plerumque subcurvatis, 80-85 \times 12-14, octosporis, J -; sporidiis oblongo-clavatis, utrinque rotundatis, unilocularibus, guttulas oleosas includentes, hyalinis, 12-14 \times 4,5-5, distichis; paraphysibus filiformibus, septatis, 2,5 μ . cr., versus apicem 2-3-tomis, apice 4 μ . lat., ibique interdum flavidulis.

Hab. ad folia caulesque putrescentes *Alchemillæ* pubescentis juxta glaciem Alpeiner Gletscher Stubai Tirolæ (Rehm).

2. *Nævia muscarina* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5772 p. 3, Extr. — Ascomatibus sparsis, primitus innatis, dein per epidermidem longitudinaliter fissam prorumpentibus, patellaribus, orbicularibus, tenuissime marginatis, fusco-nigritulis, 0,3-0,4 mm. d., excipulo membranaceo fuscidulo, parenchymatico; ascis clavatis, apice rotundatis, 25-30 \times 5-6, octosporis; poro jodi ope immutato; sporidiis clavatis, 1-cellularibus, hyalinis, 5-6 \times 2,5, distichis; paraphysibus filiformibus, septatis, hyalinis, apice obtusis, 2-3 μ . cr.

Hab. in caule emortuo *Muscari* comosi, Berencsfalu, prope Selmezbánya, Hungaria (Kmet). — Sporidiorum minutie a descriptionis *Næviæ* speciebus diversa.

3. *Nævia seriata* (Lib.) Rehm — Syll. VIII, p. 663 — var. *comedens* 5773 Rehm, Ann. Myc. III (1905) p. 414 et Ascom. Exsicc. n. 1610. — Dignoscitur matricis foliis initio viridibus denique circa ascomata decoloratis et postremo necatis; sporidiis paullo angustioribus, nempe 8-9 \times 1,5-2.

Hab. in foliis *Caricis* sp. inter Gotzing et Thalham Baviaræ superioris.

Sect. 2. Phragmosporæ.

CRYPTODISCUS Corda — Syll. VIII p. 669, XIV p. 809, XVI p. 778.

1. *Cryptodiscus albo-marginatus* Kirschst., Verh. Bot. Ver. Brandb. XLVIII (1906) pag. 39. — Ascomatibus cortice immersis, hemisphærico-prominentibus 0,5 mm. diam. poro albo-marginato cir-

ulari apertis, disco griseolo; excipulo basi brunneo, supra hyalino, ex hyphis filiformibus septatis constituto; ascis clavatis, supra rotundatis, sessilibus, tenuibus, octosporis, $70-80 \times 16-20$; sporidiis irregulariter pluries seriatis, hyalinis, clavatis, rectis v. curvulis, plerumque 8-septatis, leniter constrictulis, guttulis evanidis, faretis, $32-46 \times 5-6$; paraphysibus filiformibus, hyalinis, ascos longitudine æquantibus, supra non incrassatis, septatis, 2 μ . circ. cr.

Hab. in cortice dejecto Pruni Cerasi, Wegrand pr. Gross-Behnitz, Germania.

2. **Cryptodiscus volvatus** v. Höhnelt, *Ergeb. Bot. Exp. Südbres.* 1901, 5775 *Denk. k. Ak. d. Wiss. Wien*, Bd. LXVXIII (1907) Extr. p. 30. — Ascomatibus rotundatis, 250-400 μ . latis, immersis margine incrassatis lobato-laciniatis, sparsis, quandoque binis confluentibus; acie sterili 80 μ . lata, 55 μ . cr.; hypothecio plectenchymatico, pallido 40-50 μ . cr.; ascis clavatis $75 \times 5-6$ paraphysibus filiformibus obsitis, octosporis; sporidiis mono- v. distichis, hyalinis, elongato-ellipsoideis, utrinque obtusulis, rectis, 10×3 . J +.

Hab. in fragmento corticis, prope Butantan, Sao Paulo Brasiliæ. — A *Cr. Leprieurii* (Mont.) magnitudine omnium partium minore distinctus dicitur, sed de numero septorum sporarum auctor silet!

3. **Cryptodiscus phaneromycoides** Rehm, *Ascomyc. Exsicc. fasc.* 43, 5776 n. 1802 et *Ann. Mycol.* VII (1909) p. 134. — Ascomatibus gregariis, stipiti haud maculato primitus innatis, globoso-clausis, epidermidem obtegentem conoideo-protrudentibus, stellatim erumpentibus, ab iisque laciniis erectis coronatis discum orbicularem, ex albido roseolum, tenuissime marginatum denudentibus, 0,5-1 mm. diam., ceraceis, excipulo parenchymatice contexto, tenui hyalino, disco sicco albide cinerello; ascis clavatis, apice rotundatis, $70-80 \times 10-12$, 8-sporis, totis jodo cæruleo tinctis; sporidiis clavato-elongatis, rectis, transverse 7-septatis, hyalinis, $18-24 \times 3$, 2-3-stichis; paraphysibus filiformibus, 2 μ . cr., versus apicem subramosum 2,5 μ . cr., hyalinis.

Hab. ad stipitem Filicis cujusdam, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

PHRAGMONÆVIA Rehm — *Syll.* VIII p. 674, XIV p. 809, XVI p. 779, XVIII p. 148.

1. **Phragmonævia lignicola** Vouaux, *Bull. Soc. Mycol. Fr.* (1910) p. 154. 5777 — Ascomatibus in series longitudinales dispositis in macula albo-

scente ligni gregariis, primum hemisphaericis innatisque, postea superficiem ligni findentibus discoque emergentibus, tum plerumque in longitudinem ligni elongatis, atque utrinque attenuatis et acutiusculis, 0,5-1 mm. long., nigris, disco ovali, margine tenui; ascis cylindraceis estipitatis, 100×10 , octosporis; sporidiis uniseriatis, hyalinis, ellipsoideis, uniseptatis constrictisque, loculo inferiori tenuiori sed vel majori vel minori, $15-18 \times 5-6$, eguttulatis; paraphysibus filiformibus, paucis, ascis paullo longioribus; Jodi ope nulla.

Hab. in ligno vetusto ignoto, Numéa Nova-Caledonia (CACOT).
Phr. hysteroioidi (Desm.) Rehm affinis, sed differt forma et magnitudine sporidiorum.

XYLOGRAMMA Wallr. — Syll. VIII p. 677, XI p. 429, XIV p. 809, XVIII p. 149.

1. *Xylogramma macrosporum* Kirschst., Verh. Bot. Ver. Brandenb. 5778 XLVIII (1906) p. 40. — Ascomatibus in maculis pallescentibus vel rubidis parce gregariis, primum immersis, dein elongato-vel rotundato-prominentibus, disco pallide brunneo sed extus et margine obscuriore, usque ad 1 mm. long., ceraceis; ascis clavatis, basi in pedicellum tenuatis, supra rotundatis incrassatisque, octosporis, $110-130 \times 12-16$; sporidiis basi 1- supra 2- v. 3-stichis, hyalinis, plerumque elongato-ellipsoideis v. subcylindraceis, sæpe irregularibus, rectis v. curvulis, 4-6- plerumque 5-septatis, ibique leniter constrictulis, raro imperfecte longitudinaliter uniseptatis, $25-35 \times 6-7$; paraphysibus 2-3 μ . cr., hyalinis, filiformibus, ramosis, septatis, sursum sæpe incurvatis et epithecium efformantibus, rotundatis et quandoque parum incrassatis.

Hab. in caulibus putrescentibus Malvæ Alceæ, Gross-Behnitzer Hasellake et Artemisiæ vulgaris, prope Gross-Behnitz, Germania. — *X. caulicolæ* (Fuck.) affine sed sporidiis majoribus et pluri-septatis distinctum.

2. *Xylogramma nigerrimum* (Ell. et Ev.) Rehm, in Ann. mycol. V 5779 (1907) p. 518, *Briardia nigerrima* Ell. et Ev., Bull. South. Calif. Ac. of Sc. IV (1905) p. 62. — Ascomatibus gregariis, 1-4 mm. long., 1 mm. lat., nigris, inter fibras ligni intemperie dealbati erumpentibus; ascis primum subglobosis dein obovato-oblongis, $40 \times 12-15$, octosporis; sporidiis irregulariter confertis, oblongo-clavatis, hyalinis, dein brunneis, guttulatis, $8-12 \times 3-4$, continuis; paraphysibus supra ramosis, et epithecium nigrum formantibus

apiceque conidia subglobosa brunnea obsolete muriformi-septata, 6-7 μ . diam., gerentibus.

Hab. in ligno *Rhois laurinae*, Catalina Isl. prope litora Californiæ inf. (C. F. BAKER).

PHANEROMYCES Speg. et Har. — Syll. VIII, p. 677.

1. *Phaneromyces* ? *platensis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 454, fig. 39. — Ascomatibus innato-erumpentibus, parvis, crasse obtuseque albo-marginatis, 1-2 mm. diam., disco minuto, impresso, glaucescente v. subolivascens, pruinuloso; ascis subellipsoideis dense paraphysatis, deorsum cuneatis brevissime noduloso-pedicellatis, 60 \times 18, octosporis, jodo immutatis; paraphysibus filiformibus apice grumoso-coalescentibus; sporidiis clavato-acicularibus, 5-septatis, fasciculatis, arcuatis, deorsum conspicue tenuato-acutis, ad septa non constrictis, hyalinis, circiter 40 \times 7 (ex icone).

Hab. ad palos *Prosopidis Algarobillæ* diu intemperiei expositos Los Hornos prope La Plata, Argentina. — Habitus lichenoideus, sed thallus et gonidia nulla.

Sect. 3. Scolecosporæ.

STICTIS Pers. — Syll. VIII p. 647, X p. 44, XI p. 428, XIV p. 806, XVI p. 776, XVIII p. 146.

1. *Stictis chilensis* Speg., Fungi Chilenses (1910) p. 129, cum icon. — Ascomatibus sparsis, innatis, erumpentibus, ore trigono v. tetragono, laciniis 3-4 revolutis latis ornato donatis, disco plano glauco-cinereo, 0,5-1,5 mm. diam.; ascis cylindraceis breviter crasseque pedicellatis, 90-100 \times 8-9 octosporis, paraphysibus filiformibus apice non v. vix uncinatis obvallatis; sporidiis filiformibus dense minuteque guttulatis, hyalinis, 60-80 \times 1,5-2.

Hab. in foliis coriaceis dejectis siccis Boldoæ, Ætoxicæ, Bellotæ, Guevinæ etc. prope Talcahuano, Concepcion, Valparaiso, Chile Amer. austr.

2. *Stictis Arctostaphyli* Ferdinandsen et Winge, Botan. Tidsskr. XXVIII (1907) pag. 253, cum icon., Botan. Tidsskr. XXIX (1908) p. 312, *Coccomyces quadratus* (Sch. et Kze.) Karst. var. *Arctostaphyli* Rehm (nom. nud.) Ann. Mycol. V (1907) p. 251; *Nemacy-*

clus Penegolensis Rehm, Verh. bot. Ver. Prov. Brandenb. (1908) p. 34. — Ascomatibus hypophyllis, maculis pallidis insidentibus, erumpentibus, lobis 3-5 epidermicis circinatis, 0,5-1 mm. diam., circ. 110 μ . cr.; ascis cylindraceo-clavatis, sessilibus, 75-105 \times 9-10; sporidiis filiformibus, hyalinis, juvenilibus, ut videtur, plasmate quadripartito, spurie 3-septatis, maturis plerumque tortis, guttulat, deorsum attenuatis, 60-75 \times 1,5-2; paraphysibus numerosis, filiformibus, guttulatis, circ. 1,5 μ . cr., superne 2-3 ramulis instructis, epithecium debilem formantibus; J-.

Hab. ad folia emortua *Arctostaphyli Uvæ-ursi* pr. Borris Jutlandia.

3. *Stictis valdiviensis* Speg., Fungi Chilenses (1910) p. 130. — A. 5788
 Ascomatibus gregariis innatis, erumpentibus, ore rotundo margine elevatulo minute denticulato candido cinctis, disco carneo infosso, 0,5-1 mm. diam.; ascis linearibus, dense tenuiterque paraphysatis, breviter attenuato-pedicellatis, 150-160 \times 6; sporidiis acicularibus 9-15-septatis, ad septum medium constrictis, hyalinis, 45-55 \times 2-2,5.

Hab. in pedunculis siccis subputrescentibus *Lobeliæ Tupæ* prope Ciudad de Valdivia Chile Amer. austr.

4. *Stictis Cydoniæ* Schulz. v. Mügg. in Verhandl. zool.-bot. Gesell. 5784
 Wien (1871) p. 1250, t. XIII, f. 30. — Ascomatibus cortice innatis demum cortice secedente liberis, initio urceolatis, clausis, mox hiascentibus, excipulo nigricante præditis, 115-140 μ . diam.; disco plano pallide brunneo, nucleo candido; paraphysibus dense stipatis, filiformibus, apice gemmulis globulosis, brunneis, 2 μ . diam. terminatis; ascis non visis.

Hab. in ramulis corticatis et demum decorticatis *Cydoniæ vulgaris* in Hungaria. — Species vere dubia.

5. *Stictis friabilis* (Phill. et Pl.) Sacc. et Trav. — Syll. XX, p. 898 5785
 — *Peziza friabilis* Phill. et Plowr. in Grevillea IV (1876) p. 121, t. 62, fig. 2. — Sparsa v. gregaria, sessilis, junior globosa, dein hemispherica, extus albida, minute pubescens, concava, fragilis; margine fisso, inæquali; ascis cylindraceo-clavatis; sporidiis octonis, filiformibus, 60 \times 1, multiseptatis; paraphysibus gracilibus.

Hab. in ramulis emortuis *quercinis* inter fibras ligneas in North Wales Britanniae. — Verisimiliter ascomata observata post corticis lapsum.

6. *Stictis fimbriata* Schw. — Syll. VIII, pag. 686 — fm. *silvestris* 5786
 P. Henn., Verh. Bot. Ver. Prov. Brandb. XLVII (1905) p. 219.
 — Ascomatibus sparsis vel gregariis, immersis, convexis, limbo

elevato 5-8 radiato candido furfuraceo cinctis, disco concavo, cinereo-fusco, c. 250-350 μ . diam.; ascis subclavato-fusoideis, apice acutis, octosporis, 70-90 \times 8-10; paraphysibus filiformibus, pluriguttulatis, hyalinis, apice haud incrassatis, 2-3 μ . cr.; sporidiis filiformibus, flexuosis, apice obtusis, inferne subattenuatis, acutiusculis, pluriguttulatis dein 9-12-septatis, hyalino-cyanescentibus, 50-80 \times 2-3.

Hab. in squamis dejectis strobilorum Pini inter Lanke et Utdorf Germaniæ.

7. *Stictis tropicalis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5787 (1909) p. 455. — Verticaliter cylindracea, profunde infossa, ore minutissimo sæpius 4-dentato, albido dehiscens, 500-600 μ . alta, 100-150 μ . diam.; ascis linearibus prælongis, apice rotundatis deorsum breviter tenuato-pedicellatis, 200-225 \times 12, paraphysibus tenuissimis obvallatis, octosporis; sporidiis asci longitudine multiseptatis, non tortis, 200 \times 3,5-4, articulis non secedentibus, 7-10 μ . longis, hyalinis.

Hab. ad rhachides foliorum delapsorum Musæ paradisiacæ in hortis, Orán, Argentina.

8. *Stictis bambusella* v. Höhnelt, Ergebn. Bot. Exp. Südras. (1901) 5788 Denk. k. Ak. d. Wiss. Wien LXXXIII (1907) Extr. pag. 30. — Ascomatibus singulis, profunde immersis, rotundatis v. elongatis, circ. 500 μ . long., extus tenuiter albo-marginatis, disco flavido pallido; hypothecio 30-40 μ . crasso, pallido, minute parenchymatico; ascis cylindraceis 140-150 \times 7-8, octosporis, paraphysibus filiformibus supra incrassatis, epithecium indistinctum efformantibus obsitis, J +, primum cyaneis dein rubro-vinosis; sporidiis filiformibus, multiseptatis, 70-140 \times 1,7-3,5, articulis 3-6 μ . long. non secedentibus.

Hab. in culmis Bambusæ, ad flumen Rio Pardo in districtu S. Cruz, Sao Paulo Brasiliæ.

SCHIZOXYLON Pers. — Syll. VIII p. 697, X p. 47, XI p. 430, XIV p. 812, XVI p. 782, XVIII p. 152.

1. *Schizoxylon græcum* v. Höhnelt, Fragm. z. Myk., Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 638. — Ascomatibus sparsis, primum globoso-immersis, dein rotundato-apertis et discum rubidum v. carneum ostendentibus, 200-1200 μ . latis, 500-600 μ . altis, margine albo, crassiusculo, lobulato præditis; hypothecio hyalino, minute indistinctè celluloso-plectenchymatico circ.

60 μ . cr.; excipulo basi 40 μ . cr. sæpe oxalati calcici incrustato, tunc 120-130 μ . cr.; ascis paraphysatis, cylindraceis 280-340 \times 8-12, octosporis; sporidiis filiformibus, septatis, 200-250 \times 2-2,5, sæpe in eodem asco maturo in 2-5 articulos cylindraceos secedentibus. J -.

Hab. in ramulis putrescentibus Oleæ europææ in ins. Corcyra (Corfu) (EGGERTH).

2. *Schizoxylon melanostictum* Spegazz., Myc. Arg. IV in An. Mus. 5790 Buenos Aires (1909) pag. 456. — Minutum, erumpens, nigricans, laxè gregarium, areis albescentibus insertum, primo globulosum, 120-150 μ . diam. epidermide velatum, disco melleo, ore rotundo angusto dehiscens; ascis linearibus dense tenuissimeque paraphysatis, apice obtuse rotundatis, breviter minutè pedicellatis, 200 \times 8-10, octosporis; sporidiis ascorum longitudine cito in globulos minutos 1,5-1,7 μ . diam. secedentibus.

Hab. ad ramos emortuos Lippiæ geminatæ, Ensenada pr. La Plata Argentina.

3. *Schizoxylon dermateoides* Rehm, Ann. Mycol. IV (1906) p. 386. 5791 Ascomatibus dispersis, in cortice interiore sessilibus et prorumpentibus, globulosis, clausis, mox pseudopatellaribus, poro minutissimo pertusis, demum patellaribus apertis, disco tenuiter marginato, orbiculari, cinerescente, plano, extus glabris, excipulo crasso parenchymatico, totis pruina alba tectis, 0,5-1,5 mm. diam., ceraceis; ascis cylindraceis, versus apicem subacutatis, 2-4-sporis, 200 \times 12; sporidiis filiformibus, septatis, asci longitudine, parallele positæ, intra ascum cellulis singulis oblongis hyalinis, 7-8 \times 3-4 μ . secessis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr., ad apicem conglutinatis et epithecium crassum, viridi-fusculum, jodi ope cæruleo-tinctum formantibus.

Hab. in truncis emortuis Salicis in silvis, Lyndonville N. Y. Amer. bor. (C. E. FAIRMAN). — *Schizoxylon argentino* forte affine.

4. *Schizoxylon gigas* Spegazz., Myc. Arg. IV in Anal. Mus. Buenos Aires (1909) p. 456. — Maximum, superficiale, lenticulari-orbiculare, margine crasso obtuso albo discoque convexo olivaceo præditum, initio glauco-pruinose serius nudum, 2-3 mm. diam., 1,5 mm. crass., extus fusculum; ascis linearibus apice acutiuscule tenuatis, 250-500 \times 10; octosporis, breviter crasseque pedicellatis; sporidiis fasciculatis filiformibus mox in articulos cylindraceos rectos, 10-25 μ . longos secedentibus, 2 μ . cr., hyalinis.

Hab. ad lignum putrescens in hortis pr. La Plata Argentina. — Affine *Schiz. æruginoso* sed sat distinctum.

NEMACYCLUS Fuck. — Syll. VIII p. 701, X p. 47, XI p. 431.

1. **Nemacyclus Lamberti** Rehm in Strasser, Verh. k. k. zool.-bot. Ges. 5798
Wien LX (1910) p. 466. — Ascomatibus gregariis, cortice immutato innatis, globosis, epidermidem sensim semiglobose protuberantibus, dein perforantibus discumque flavidum orbicularem, suburceolatum, epidermidis laciniis 4-5 coronatum denudantibus, 0,5-2 mm. diam.; excipulo membranaceo, parenchymatico, flavidulo; ascis cylindraceo-clavatis, obtusis, $90-95 \approx 12$, 8-sporis, jodo immutatis; sporidiis acicularibus, apice superiore obtusis, inferiore acutatis, rectis v. subflexuosis, 12-cellularibus, hyalinis, $40-60 \approx 3$, distichis; paraphysibus filiformibus, apice obtusis, $2-2,5 \mu$. crassis, hyalinis.

Hab. ad ramulum Lonicæræ, Ybbsitz Austria inf. (P. LAMBERT).

2. **Nemacyclus caulium** v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV, 5794
Abt. I (1906) p. 650. — Ascomatibus gregariis, primum clausis et immersis, dein corticem postremum infuscatum infantibus et laciniatim erumpentibus nec non discum suborbicularem vel inæqualiter angulosum $\frac{1}{3}-\frac{4}{3}$ mm. long. et $\frac{1}{3}-\frac{2}{3}$ lat. ostendentibus; ascis clavatis apice obtuso-rotundatis deorsum valde tenuatis, $52 \approx 10$, octosporis; sporidiis filiformibus parallelis utrinque obtusulis octocellularibus, 8-12-guttulatis, $36-52 \approx 1,6-2,5$; articulis 4-5 μ . long.; paraphysibus copiosissimis, filiformibus, sursum ramosis et epithecium tenue hyalinum formantibus; hypothecio ex cellulis 3-6 μ . lat., supra hyalino infra flavido; excipulo nullo.

Hab. in caulibus emortuis Urticæ dioicæ, Wiesenbachtal in Austria inf. — *Nemacyclo flavo* affinis.

Sect. 4. Dictyosporæ.

PLEIOSTICTIS Rehm — Syll. VIII p. 703, XI p. 431.

1. **Pleiostictis Ilcis** v. Höhn., Fragm. z. Myk. VIII (1909) in Stzb. 5795
K. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1227. — Ascomatibus sparsis, immersis, primum elongatis, dein rotundatis, udis 500-800 μ . longis, sed sæpe etiam minoribus, primum immersis clausis, demum supra lobulato- v. irregulariter lacerato-apertis et discum nigrum ostendentibus; stratu hymeniali 120-130 μ . cr., hypothecio tenui, pallido; excipulo basi vix evoluto pallido, ceterum nigro-olivaceo, minute parenchymatico, carbonaceo-coriaceo; ascis

paraphysatis, clavatis, sessilibus vel breviter angustatis, bis-octosporis, $125 \approx 16$; sporidiis ellipsoideo-ovoideis, $16-40 \approx 7-15$, septis transversis 4-12 longitudinalibus 1-3, diu hyalinis, demum olivaceis.

Hab. in ligno Ilicis Aquifolii, Almbachklamm pr. Berchtesgaden in Bavaria (REHM). — *Pl. propolioidi* Rehm affinis.

Fam. 9. Phacidiaceæ FR.

Sect. 1. Hyalosporæ.

PSEUDORHYTISMA Juel — Syll. XIV p. 33.

1. Pseudorhytisma Myrtacearum Rick, Broteria V (1906) p. 38. — 5796

Stromate orbiculari, amphigeno, atro, sæpe pulvinato, rugoso, 3-5 mm. diam., punctato, denique fisso, rhytismoideo, disco albido; ascis usque ad $190 \approx 20$, breviter pedicellatis, cylindraceis, apice incrassatis, octosporis; sporidiis uniserialibus, oblongis, sed apicibus abrupte acutatis, $20-30 \approx 10-15$, guttulatis, unicellularibus; paraphysibus filiformibus, hyalinis, dilutioribus.

Hab. in foliis Myrtaceæ cujusdam, Rio Grande do Sul Brasiliæ. — Socia *Melasmia Myrtacearum* Henn. quæ probabiliter statum pyrenidicum sistit.

PHACIDIUM Fr. — Syll. VIII p. 709, X p. 48, XI p. 431, XIV p. 813, XVI p. 783, XVIII p. 156.

1. Phacidium Aquifolii (DC.) Schmidt et Kunze, Mykol. Hefte I, p. 34, 5797

t. II, fig. 13, Rehm Discom. p. 68, *Xyloma Aquifolii* DC. Mém. Mus. III, p. 324, t. 3. — Ascomatibus gregariis, innatis, foliorum epidermidem griseam dein nigricantem bullatim elevantibus, demum vertice in 4 lacinias æquales hiascentibus et discum rotundum pallidum ostendentibus, 0,5 mm. diam.; ascis clavatis, apice obtuse acutatis jodoque tinctis, octosporis, $75-90 \approx 18-20$; sporidiis ex oblongo ovoideis v. subfusoides, continuis, eguttatis, hyalinis, $17-20 \approx 6-8$, distichis; paraphysibus tenuibus apice ramulosis et subincrassatis brunneolis.

Hab. in pag. super. foliorum Ilicis Aquifolii in Gallia, Germania, Italia.

2. Phacidium Marantaceæ P. Henn., in Flore du Bas- et Moy-Con- 5798

go, Ann. Mus. du Congo, v. II, fasc. II (1907) pag. 100. — Ascomatibus innato-superficialibus, gregarie sparsis, nervos subse-quentibus, carbonaceo-atris, rotundato-pulvinatis, substellate v. longitudinaliter rimosis, 1-2 mm. diam.; ascis clavatis (plerumque im-maturis) 8-sporis, 80-90 \times 13-18; sporidiis subdistichis, continuis, hyalinis, 12-18 \times 5-6.

Hab. in foliis Marantaceæ, Kisantu Congo, Africa trop. (VANDERYST).

3. *Phacidium diminuens* Karst. — Syll. VIII, p. 721 — var. *tetra-* 5799
sporum Rehm, in Jaap Beitr. Pilzfl. d. Schw., Ann. Myc. v. V
(1907) p. 251 (*Nævia*). — Distinguitur ascis tetrasporis.

Hab. in culmis vetustis Eriophori (Trichospori) cæspitosi supra Grimselalpise Helvetiæ.

4. *Phacidium coopertum* (Desm.) von Höhnelt, Österr. Bot. Ztschr. 5800
LVIII (1907) p. 324. — Ita vocanda *Sphaeria cooperta* Desm. seu
Læstadia cooperta (Desm.) Sacc. Syll. I, p. 426, teste v. Höhn. l. c.

PSEUDOPEZIZA Fuck. — Syll. VIII p. 723, XI p. 431, XIV p. 813,
XVI p. 784, XVIII p. 156.

1. *Pseudopeziza repanda* (Fr.) Karst. — Syll. VIII, p. 727 — var. 5801
Thalictri P. Henn., Engl. Jahrb. XXXVII (1905) p. 162. (*Phacid.*
repand.). — Maculis effusis, fuscis, ascomatibus epiphyllis sparsis,
subhæmisphæricis, atris, lobato-rimosis, c. 300-400 μ . diam.; ascis
clavatis, obtusis, octosporis, 50-55 \times 7; sporidiis distichis, oblonge
ellipsoideis, rectis v. curvulis, obtusis, 2-guttulatis, 7-10 \times 3-3,5,
hyalinis.

Hab. in foliis vivis *Thalictri simplicis*, Tokyo Horjnoushi,
Japonia (MIYABE). — A typo differt sporidiis latioribus, non cla-
vatis sed ellipsoideis.

2. *Pseudopeziza Ribis* Rehm apud Klebahn, Centralbl. f. Bakt., II 5802
Abt., XV (1905) p. 336. — Ascomatibus erumpentibus breviter et
crasse pedicellatis supra applanatis et circ. 230 μ . latis; ascis cla-
vatis 80-100 \times 18-20; sporidiis ovoideis 12-17 \times 7-8; paraphysibus
filiformibus, ramosis, apice vix incrassatis.

Hab. in foliis siccis *Ribis rubri*, *R. aurei*, Germania. —
Est status ascophorus *Glæosporii Ribis* (Lib.) Mont. et Desm. —
Cl. Klebahn in Zeitschr. f. Pflanzenkr. XVI (1906) p. 82 pro hac
specie constituit gen. *Drepanopeziza*.

3. *Pseudopeziza Jaapii* Rehm, Ascom. exsicc. n. 1727, Ann. Mycol. 5803
V (1907) p. 465. — Ascomatibus in hypophyllo late testaceo tin-

cto plerumque arcte congregatis, maculis fusco-brunneis v. nigrescentibus innatis, semiglobose prominentibus, clausis, dein urceolatis, disco orbiculari subhyalino, tenuiter marginato, excipulo glabro, fuscidulo, cum folii cellulis arcte connato, versus marginem cellulis elongatis contexto, 0,2-0,3 mm. diam.; ascis fuscoideis, lata basi sessilibus, versus apicem acutatis subincrassatisque, octosporis, 50-60 \approx 14; poro jodo dilute tincto; sporidiis oblongis, sæpe subcurvatis, interdum apice superiore obtusis, inferiore acutatis, 1-cellularibus, hyalinis, 25 \approx 2,5, parallele in asci lumine positis; paraphysibus filiformibus, 1,5 μ ., versus apicem 2-4 μ . cr., hyalinis.

Hab. ad folia putrida Pruni Padi, Triglitz, Prignitz, Germania (JAAP).

4. **Pseudopeziza Loti** Boud., Icon. Mycol. t. III, tab. 562 (1907), Hist. 5804 et Classif. Discomyc. Europe (1907) p. 179. — Erumpens, minuta, sessilis, extus nigricans, margine denticulato, hymenio cinerescente 0,20-0,30 mm. lato; ascis oblongo-clavatis, octosporis, foramine immarginato, 50 \approx 8, ad basim non attenuatis; paraphysibus cylindraceis, simplicibus aut parce divisis, vix septatis, ad apicem rarius incrassatis, 2-4 μ . cr.; sporidiis albis, oblongo-clavatis, ad apicem intus granulosis, 12-14 \approx 2,5-3.

Hab. in caulibus emortuis Loti majoris, Montmorency Gallia. — A *Ps. Trifolii* et *Ps. Medicaginis* differt præcipue sporidiis non guttulatis et matrice diversa.

5. **Pseudopeziza subcalycella** Rehm, Ann. Mycol. VII (1909) p. 541. 5805 — Ascomatibus in maculis orbicularibus creberrimis, crasse fusco-cinctis, demum papyraceo-albidulis, 1,5-2 mm. diam., 1(-2) plerumque in hypophyllo innatis, dein prorumpentibus et sessilibus, primitus globoso-clausis, dein disco orbiculari explanato dilute roseo, sicco vitellino, margine tenuissimo albidulo cincto, versus basim constrictis, excipulo albescente, glabro, parenchymatice crasse contexto; ascis clavatis, apice rotundatis, usque ad 100 \approx 8-9, octosporis, jodi ope nulla; sporidiis ellipsoideis, unicellularibus, hyalinis, 2-guttulatis, 8-9 \approx 4, monostichis; paraphysibus filiformibus, 2,5, ad apicem usque ad 3 μ . cr., hyalinis.

Hab. ad Miconiæ folia, Sao Leopoldo, Rio Grande do Sul Brasilæ (THEISSEN S. J.).

6. **Pseudopeziza Salicis** (Tul.?) A. Potebnia, Ann. Mycol. (1910) p. 79. 5806 An *Trochila Salicis* Tul. — Ascomatibus sparsis, subhemisphaericis erumpentibus, parte basali conica folio immersis, 170 μ . altis, superne 140 μ . lat., excipulo atro-brunneo cinctis; hypothecii con-

textu pseudoparenchymatico ab illo subhymeniali prosenchymatico distincto; ascis clavatis, 60-70 \times 14, octosporis; paraphysibus filiformibus, simplicibus v. furcatis, asco paullo longioribus, 75-85 \times 2; sporidiis ovoideis, biguttulatis, monostichis, 13-14 \times 5,5-6.

Hab. in foliis hibernatis Salicis albæ, socio *Glæosporio Salicis*, cujus est status ascophorus, in Germania (JAAP).

7. *Pseudopeziza Vleugellii* Rehm, in litt. Jan. 1912. — Ascomatibus 5807
in hypophyllo late fuscato gregariis, innatis dein emergentibus, orbicularibus, siccis concavis, pallidioribus; disco plano vel convexulo, haud conspicue marginato, rufo-ferrugineo, 100-200 μ . diam., excipulo tenuissimo parenchymatico; ascis cylindraceutis, apice rotundatis, 70-80 \times 10-13, bisporis, jodo immutatis; sporidiis oblongis utrinque rotundatis, haud guttatis, 1-cellularibus, hyalinis, 15-17 \times 8-10, monostichis; paraphysibus filiformibus, septatis, hyalinis, 2 μ . cr., ad apicem 2,5 μ . cr.

Hab. ad folia putrida Salicis nigricantis, Umea Sueciæ bor. (VLEUGEL). — A *Pseud. versicolori* (Wahlbg.) Rostr. et *Pseud. Salicis* A. Potebn. imprimis ascis bisporis dignoscenda.

TROCHILA Fr. — Syll. VIII p. 728, X p. 49, XIV p. 814, XVI p. 785, XVIII p. 158.

1. *Trochila ? chilensis* Speg., Fungi Chilenses (1910) pag. 130. — 5808
Ascomatibus sæpius epiphyllis innatis, epidermide nigrificata decidua tectis, disco nigris, 0,5-1,5 mm. diam.; ascis subclavulatis antice subacutiuscule rotundatis, postice leniter sensimque attenuato-pedicellatis, 70-80 \times 8-9, octosporis, paraphysibus filiformibus apice non v. vix subincrassatulis cinetis; sporidiis e fusoidesubnavicularibus utrinque subacutiusculis atque minute uniguttulatis, parvis, hyalinis, oblique monostichis, 14-15 \times 4.

Hab. in foliis dejectis Lardizabalæ biternatæ, Cerro Caracol de Concepcion, Chile, Amer. austr.

2. *Trochila Perseæ* Speg., Fungi Chilenses (1910) p. 131, cum icon. 5809
— Ascomatibus sparsis amphigenis, orbicularibus parvis, epidermide nigrificata serius sæpius cruciatim disrupta tectis, disco plano fusco; ascis clavulatis apice obtusissimis, postice longiuscule attenuato-pedicellatis, 50-60 \times 10, parce paraphysatis, tunica jodi ope perdilute cærulescente; sporidiis distichis e cylindraceuto subellipsoideis, subnavicularibus, utrinque obtusis, parvis, hyalinis, 9-10 \times 3.

Hab. in foliis dejectis subputrescentibus Perseæ Lingue prope Ciudad de Valdivia Chile, Amer. austr.

3. *Trochila leopoldina* Rehm, Ann. Mycol. VII (1909) pag. 539. — 5810

— Ascomatibus hypophyllis, gregariis, innatis, primitus globosoclausis, nigro-tectis, dein emergentibus, disco extus tenuiter laciniato, orbiculari, hyalino, explanato, 0,3-0,4 mm. diam., siccis nigris; ascis clavatis, apice rotundatis, 45-50 \approx 7, octosporis; sporidiis clavatis, unicellularibus, biguttatis, hyalinis, 8-9 \approx 3, distichis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr., versus apicem 2 μ . cr.; excipulo fusco, cellulis permagnis parenchymatice contexto; hymenio dilutissime flavidulo.

Hab. in foliis *Nectandræ rigidæ*, Sao Leopoldo Rio Grande do Sul Brasilæ (THEISSEN S. J.).

STEGIA Fr. — Syll. VIII p. 733, XIV p. 814, XVIII p. 157.1. *Stegia subvelata* Rehm — Syll. VIII, pag. 734 — fm. *juncicola* 5811

Rehm ap. Jaap in Abh. bot. Ver. Prov. Brandenb. IL (1907) p. 13.

Hab. in calamis *Junci Jacquini*, Passo della Furca, 2430 m. alt. Helvetia. — A typo vix, nisi matrice, differt.

BONANSEJA Saccardo, Microm. Americani novi, Journ. of Myc. v. XII (1906) p. 50 (Etym. a cl. doct. SYLVIO BONANSEA fungi detectore).

— Ascomata epidermide tecta, dein erumpenti-subsuperficialia, disciformia, ceracea (brunnea), disco mox aperto, applanato; excipulo brevissimo obsolete prosenchymatico. Asci cylindracei, paraphysati, octospori. Sporidia sphaeroidea, hyalina, nucleata, dein brunnea. — Gen. *Stictophacidio* Rehm affine sed præcipue sporidiis globosis distinguendum. Est quasi *Pseudopeziza* sphaero-phæospora.

1. *Bonanseja mexicana* Saccardo, l. c. pag. 51. — Ascomatibus epi- 5812

phyllis, secus nervos seriatis et interdum confluentibus, rimose erumpentibus et epidermide bullata exalbata tectis v. cinotis, disciformi-appplanatis, 400-600 μ . diam., tenuissime marginatis, ambitu circulari-angulosis, umbrinis, ceraceis; ascis cylindraceis rarius cylindrico-clavulatis, 100 \approx 8 vel 100 \approx 11 (si clavulatis deorsum sensim tenuatis, parte sporif. 50-60 μ . longa, apice obtusis, octosporis; paraphysibus bacillaribus, hyalinis, 2-3 μ . cr., continuis, simplicibus; sporidiis typice monostichis, rarius subdistichis, globosis, 7-8 μ . diam., initio hyalinis, dein brunneis, 1- raro 2-nucleatis, levibus.

Hab. in foliis languidis v. emortuis *Anonæ Cherimoliæ*, Tenancingo, Mexico. — Excipulum tenuissimum rufo-melleum, granulis crystallinis copiosis asperulatum.

Sect. 3. Didymosporæ.

ABROTHALLUS De Not. — Syll. VIII p. 739, XVIII p. 161.

1. **Abrothallus Parmeliarum** (Sommf.) Nyl. — Syll. VIII, p. 739 — 5813
var. *dothideæformis* (Fekl. in herb. sub *Abrothallus*) Rehm, Ann. Mycol. V (1907) p. 535. — Ascomatibus in superficie thalli orbiculariter vel striæformiter usque ad 1 cm. longi, convexe tumidis, demum maculatim denigratis, arcte congregatis, innatis, per rimas reticulatas nigras prorumpentibus, ca. 150 μ . diam.; ascis cylindraceis, apice rotundatis, 80×9 , octosporis, jodi ope nulla; sporidiis subclavatis, utrinque obtusis, medio septatis et subconstrictis, utraque cellula guttam magnam oleosam includente, cellula superiore latiore, subfuscis, $12 \times 5-6$, monostichis; paraphysibus arcte conglutinatis, hyalinis.

Hab. in thallo *Peltigeræ caninæ*, Badenheim, Germania (FUCKEL in herb. BOISSIER).

2. **Abrothallus Moorei** Lindsay, Observ. on new Lichen. Microfungi 5814 (1869) p. 546, t. 24, f. 18-21. — Ascomatibus . . . ; ascis (ex icone) tereti-clavatis apice rotundatis, deorsum sensim et breviter tenuato-stipitatis, octosporis; sporidiis monostichis oblongis continuis (?) hyalinis (?) dein 1-septatis, brunneis.

Hab. in thallo *Cladoniæ bellidifloræ*, Kelly's Green Hibernia (Ireland) *Verrucariæ Taylori*, Verr. fusiformis et *Graphidis scriptæ* in Britannia. — Descriptio l. c. desideratur et species videtur per dubia.

3. **Abrothallus cærulescens** Kotte, Centralbl. f. Bakter. etc. II Abt. 5815 XXIV Bd. (1909) pag. 86, tab. III, fig. 31. — Mycelio jodi ope cyaneo tincto; sporidiis $13-15,6 \times 4,9-5,9$.

Hab. in *Parmelia conspersa* in Germania.

4. **Abrothallus Curreyi** Lindsay, Lich. and Fgi. Otago p. 409, t. 29, 5816 fig. 1-5. — Syll. XIX, p. 1. — Ascomatibus scutellato-disciformibus rufo-brunneis pallide marginatis; ascis clavatis, 30×15 , breve stipitatis, paraphysibus clavatis sursum atro-brunneis, stipatis obvallatis; sporidiis ellipsoideis v. suboblongis, $7-8 \times 5-6$, hyalinis, utrinque obtusis, medio sæpe constrictulis et verisimiliter demum 1-septatis et brunneis.

Hab. parasitice in thallo *Parmeliæ perforatæ* ad truncos et ramos arborum in Nova Zelandia.

5. *Abrothallus Glabratulæ* Kotte, Centralbl. f. Bakter. etc. II Abt. 5817
XXIV Bd. (1909) pag. 80, tab. III, fig. 25. — Mycelio jodii ope
azureo tincto; sporidiis $10,9-13,1 \times 4,6-5,2$; conidiis $5,4-6,5 \times 3,9-4,4$.
Hab. in *Parmelia glabratula* in Tirolia merid. et Bavaria.
6. *Abrothallus Peyritschii* (Stein) Kotte, Centralbl. f. Bakter. etc. II 5818
Abt. XXIV Bd. (1909) p. 76, tab. I, fig. 1-24, *Abrothallus Parmeliarum* var. *Peyritschii* Stein 1879. — Mycelio jodii ope cyaneo
tincto; sporidiis $10,4-13 \times 4,6-5,9$; conidiis $5,2-6,7 \times 3,9-5,2$.
Hab. in thallo *Cetrariæ caperatae*, Austria et Tirolia meridionali.
7. *Abrothallus Cetrariæ* Kotte, Centralbl. f. Bakter. etc. II. Abt. 5819
XXIV Bd. (1909) p. 82, fig. 1 et tab. III, fig. 26-28. — Verrucas seu gallas efformans; mycelio jodi ope nulla; sporidiis $12,4-13,7 \times 3,9-6,2$; conidiis $4,9-6,5 \times 3,9-4,9$.

KEITHIA Sacc. — Syll. X, p. 49.

1. *Keithia tetraspora* (Phillips) Sacc. — Sacc. Syll. X, p. 50. — Huc 5820
ducenda est, præeunte cl. Patouillard, *Didymascella Oxycedri* Maire
et Sacc. — Syll. XVIII, p. 162 — Confer R. Maire in Bull. trim.
Soc. Myc. de France (1905) p. 140. — Genus *Didymascella* Maire
et Sacc. est inde delendum. Species habitat in Juniperis in Britannia et Corsica.

FABRÆA Sacc. — Syll. VIII p. 735, X p. 50, XIV p. 815, XVIII p. 160.

1. *Fabræa Crantziæ* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5821
(1909) p. 457, fig. 40. — Innato-erumpens, laxè gregaria, rufescens glabra, minuta, orbicularis, infra convexula, supra applanata, margine integerrima, 150-200 μ . diam., subcoriacea; ascis subclavulatis, apapophysatis, apice acutiuscule subrotundatis, crassiuscule tunicatis, 50×12 ; sporidiis elliptico-biconicis, diblastis, hyalinis, ad septum non constrictis, 16×5 , lenissime inæquilateris.
Hab. ad folia viva *Crantziæ* lineatæ in inundatis, Canadon, Gostra, Chubut, Patagonia reip. Argentinæ.

PHÆOFABRÆA Rehm, Ann. Mycol. VII (1909) p. 541 (Etym. *phæos* obscurus et *Fabræa*). — Sporidiis subfuscis a *Fabræa* imprimis distinguitur.

1. *Phæofabræa Miconiæ* Rehm, l. c. — Ascomatibus in maculis epiphyllis granulato-convexis, suborbicularibus, fusciscentibus 1-4 mm.

diam, in hypophyllo demum subfuscis, hypophyllis, erumpentibus, plerumque 2-4 aggregatis, rarius dispersis, primitus globoso-clausis, dein suburceolatis, tenuissime marginatis, demum patellaribus, disco fuscidulo crasse marginato, 0,3-0,5 mm. diam., denique sessilibus; excipulo ab initio albescente, dein fusco, glabro, sicco atro, corrugato, crasso; ascis clavatis, apice rotundatis, 90-100 \approx 10, octosporis, jodi ope nulla; sporidiis oblongis, utrinque rotundatis, subfuscis, septo medio hyalino, utraque cellula guttam oleosam magnam includente, 1(-2)-stichis; paraphysibus filiformibus, 2 μ ., versus apicem 4 μ . cr. et subfuscis, epithecium formantibus.

Hab. ad folia Miconiæ, Sao Leopoldo Rio Grande do Sul Brasilæ (THEISSEN S. J.).

Sect. 3. Scolecosporæ.

RHYTISMA Fr. — Syll. VIII p. 752, X p. 51, XI p. 433, XIV p. 817, XVI p. 790, XVIII p. 164.

1. *Rhytisma acerinum* (Pers.) Fr. — Syll. VIII, p. 753 — var. *australe* Sacc. in Ann. Mycol. (1911) p. 250. — A typo differt ascomatibus in circulum magis regularem et minus confertim dispositis, paullo majoribus, 3 \approx 1,5 mm., opace nigricantibus, non nitidis (ob epidermidis matricis naturam); fructificatione eadem.

Hab. in foliis languidis Aceris obtusifolii, Mondoulla ins. Cypri (J. HOLMBOE, comm. G. LAGERHEIM).

2. *Rhytisma* ? *Lagerstrœmiæ* P. Henn., Hedwigia XLVII (1908) p. 262. — Stromatibus innatis, rotundatis v. effusis, epiphyllis, atris, rimosis (immaturis visis).

Hab. in foliis Lagerstrœmiæ speciosæ, Luzon, Prov. Bataan, Lamao ins. Philipp. (COPELAND).

3. *Rhytisma* ? *Viburni* P. Henn., Hedwigia XLVII (1908) p. 262. — Stromatibus amphigenis, atris, bullatis, rotundatis (immaturis observatis).

Hab. in foliis [Viburni?], Luzon, Prov. Benguet, Mt. Tuglon ins. Philippin. (MERRILL).

4. *Rhytisma Padi* Rabenh. in Kl. Herb. viv. n. 761 et 1953 (nomen nudum).

Hab. in foliis Pruni Padi in Germania.

5. *Rhytisma Ulmi* Engelh. Abhandl. Senckenb. nat. Ges. XXIX (1908).

Hab. in pliocæne super. in Germania.

COCCOMYCES De Not. — Syll. VIII p. 744, X p. 51, XI p. 432, XIV p. 818, XVI p. 789, XVIII p. 164.

1. *Coccomyces Verbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 5828 (1908) p. 132. — Maculis suborbicularibus subdefinitis 3-10 mm. diam.; ascomatibus in maculis laxè gregariis ex orbiculari subquadratis 150-200 μ . diam., stellatim dehiscentibus; ascis fusoideis brevissime pedicellatis, supra crassiuscule tunicatis, 50 \approx 5-6, paraphysibus filiformibus simplicibus apice vix incrassatulis, plus minusve subuncinatis commixtis, octosporis; sporidiis acicularibus 40 \approx 1, minute multi-guttulatis, hyalinis.

Hab. ad folia dejecta subputrescentia *Ilicis* paraguayensis prope San Pedro Argentinae Amer. austr.

2. *Coccomyces Boydii* A. L. Smith, Trans. Brit. Mycol. Soc. 1907, 5829 v. III (1908) p. 39. — Sparsus, suborbicularis, subdepressus, innato-emergens et per corticem rotundatim dehiscentem emergens, disco pallido v. carneo-flavido, subnitido, 1-3 mm. lat.; ascis cylindræo-clavatis, apice attenuatis, 90-115 \approx 8; sporidiis filiformibus, multi-guttulatis v. obsolete multi-septatis, hyalinis, circ. 50-55 \approx 1; paraphysibus numerosis, filiformibus, simplicibus, apicem versus flexuosis, quam ascis longioribus, omnino hyalinis, 1,5-2 μ . latis.

Hab. ad corticem *Myricæ* Gales, Killin Perthshire, Britannia (D. A. BOYD). — *C. triangulari* affinis sed differt ascis et paraphysibus angustioribus, sporidiis brevioribus etc.

3. *Coccomyces pampeanus* Speg. — Syll. XVIII, p. 818 — var. *chilensis* Speg., Fungi Chilenses (1910) p. 132, cum icon. — A typo recedit ascis sporidiisque paullo longioribus crassioribusque (ascis 80 \approx 12-14; sporidiis 50-55 \approx 2-2,5).

Hab. in foliis emortuis siccis *Eryngii* paniculati, Cerro Caracol de Concepcion, Chile Amer. austr.

4. *Coccomyces dentatus* (Kze. et Sch.) Sacc. — Syll. VIII, p. 745 5831 — var. *Lauri* Rehm in Theiss. Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, pag. 406. — Ascomatibus hypophyllis 0,6-1 mm. diam., cruciatis v. 3-5-lobulatis; ascis 65-90 \approx 9-11, basi longe attenuatis, supra subcuneatis; sporidiis 50-62 \approx 2.

Hab. in foliis siccis Lauraceæ cujusdam, Rio Grande do Sul Brasiliæ.

5. *Coccomyces quadratus* (Schm. et Kunze) Karst. — Syll. VIII, 5832 p. 746 — var. *Arctostaphyli* Rehm, in Jaap Beitr. Pilzfl. d. Schw. Ann. Myc. v. V (1907) p. 251. — (Nomen nudum),

Hab. in pag. inf. foliorum *Arctostaphyli Uvæ-ursi*, M. Schyningen Platte, 1975 m. alt. et M. Sempione (Simplonspitz) 2020 m. alt.

6. *Coccomyces Villæ-Viçosæ* Torrend. Bull. Soc. portugaise Sc. nat. 5883 III, 1 (1909) p. 7 (extr.). — Ascomatibus primum immersis, atris, rotundis, dein erumpentibus, excipulo irregulariter et laciniatim rupto, carbonaceo, crasso, atro, 0,5-1 mm. diam.; disco griseo-pallido; ascis clavatis, 140-170 \times 6-10, deorsum attenuatis, apice rotundatis, paraphysibus filiformibus, apice vix incrassatis; sporidiis linearibus, 70-80 \times 1,5-2, sursum attenuatis, ibique vix 1 μ . cr., primum irregulariter guttulatis, dein 7-8-septatis, interdum curvulis v. arcuatis.

Hab. in ligno pineo, Villa Viçosa Lusitaniæ. — Affinis *Cocc. Pini*, a quo differt sporidiis angustioribus, ascis majoribus et ascomatibus minoribus.

7. *Coccomyces Bromeliacearum* Theiss., Beih. Bot. Centralbl. Bd. 5884 XXVII (1910) Abt. II, p. 407. — Ascomatibus tectis, rectangularibus, rarius quadratis v. pentagonis, pulvinato-pyramidatis, acutius costatis, nigerrimis, nitentibus, margine stromatico nigro subundulato cinctis, c. 1 mm. diam. v. 1-1,2 \times 0,6-0,8 mm., cruciatim vel 5-laciniatim dehiscentibus, disco griseo; ascis cylindraceo-clavatis, breviter pedicellatis, supra rotundatis v. leniter angustato-conoideis, p. sp. 78-90 \times 8-11, paraphysibus dilutis, dense constipatis, apice non incrassatis, 2-2,5 μ . cr. obvallatis; sporidiis filiformibus, hyalinis (v. lenissime flavidulis) parallelis, guttulatis, 60-75 \times 1,5.

Hab. in utraque parte foliorum basaliū aridorum Bromeliaceæ cujusdam epiphytæ, Sao Leopoldo, Rio Grande do Sul Brasilæ (J. Rick).

CLITHRIS Fr. — Syll. II p. 803, IX p. 1027 (*Colpoma*), XVIII p. 165.

1. *Clithris Graphis* Rehm Ann. Mycol. VII (1909) p. 533. — Ascomatibus gregariis, epidermide haud mutata primitus innatis, dein ab ea marginatis erumpentibus, demum sessilibus, linearibus, rectis v. vario modo subcurvatis, utrinque acutatis, plerumque arcte congregatis, transverse in ramulo sitis, nigris, scabris, 0,5-5 mm. longis, 0,4-0,5 mm. latis, rima angusta lineari apertis, labiis elongato-rugosis, paullulum distantibus, haud carbonaceis; ascis clavatis, apice rotundatis, 80-85 \times 9, octosporis; sporidiis acicularibus, rectis, non v. indistincte septatis, hyalinis, 30-33 \times 1,2, parallele positis;

paraphysibus filiformibus, apice circinato-flexuosis, hyalinis, 1,5 μ . crassis.

Hab. ad ramum corticatum Pini balsameæ, S. Juan Island Wash. Amer. bor. (E. T. et S. A. HARPER). — *Clithri crispæ* proxima.

Sect. 4. Dictyosporæ.

DOTHIORA Fr. — Syll. VIII p. 764, XVI p. 790.

1. **Dothiera Salicis** Vleugel, Svensk Botanisk Tidskr. Bd. II (1908) 5886 pag. 374, fig. 3, *a*, *b*. — Ascomatibus gregariis, primo in cortice immersis, sphæroideis, clausis, dein per rimam longitudinalem vel lacinias 3-4 prorumpentibus, atque laciniiis circumdatis, applanatis, nigris; ascis clavatis 80-140 \times 12-20; sporidiis hyalinis, 5-7-loculatis, clavato-fusoideis, in medio paulum constrictis, loculis singulis septo longitudinali divisus, 26-29 \times 6,5-8.

Hab. in cortice Salicis sp., Umea Sueciæ.

Fam. 10. Patellariaceæ Fr.

Sect. 5. Hyalosporæ.

PATINELLA Sacc. — Syll. VIII p. 769, X p. 52, XI p. 433, XIV p. 818, XVI p. 791, XVIII p. 165.

1. **Patinella californica** Rehm, Ann. Mycol. VII (1909) p. 534. — 5837 Ascomatibus gregariis, primitus innatis, clausis, dein emergentibus, demum fere sessilibus, oblongis, vario modo contortis, disco plus minusve applanato et orbiculari, distincte marginato, atris, 0,2-0,8 mm. diam., excipulo subfusco, glabro, parenchymatice crasse contexto, siccis corrugatis; ascis clavatis, apice rotundatis, 60-65 \times 7-8, 8-sporis jodo immutatis; sporidiis ellipsoideis, 1-cellularibus, biguttulatis, hyalinis, 7-8 \times 2,5-3, distichis; paraphysibus filiformibus, ad apicem dichotomis, usque ad 5 μ . crassis et fuscidulis, epithecium formantibus; hypothecio fuscidulo.

Hab. in ramis Adenostomatis fasciculati emortuis, Mounts prope Claremont California Amer. bor. (C. F. BAKER). — *P. flexellæ* proxima.

2. *Patinella tryblidioides* Rehm, Ann. Mycol. V (1907) pag. 534. — 5888

Ascomatibus dispersis, erumpentibus, dein sessilibus, patellaribus, primitus clausis, crasse marginatis, nigris; glabris, 0,3-0,5 mm. d., coriaceis; ascis clavatis, apice rotundatis, 70-75 × 14-15, octosporis, jodi ope totis caerulescentibus; sporidiis ovoideis, 1-cellularibus, guttulis oleosis repletis, hyalinis, 12 × 7, 1-stichis; paraphysibus apice dichotomis et incrassatis, septatis, epithecium chalybeo-caeruleum formantibus; hypothecio subhyalino.

Hab. ad ramulum exsiccatum Juniperi in valle Venna alpium tridentinarum prope Brennerum, ca. 1800 m. (Dr. REHM). — Ab affini *Pat. atro-viridi* dignoscitur ascomatis colore et ascis sporidiisque multo amplioribus.

PSEUDOPHACIDIUM Karst. — Syll. VIII p. 776, XIV p. 818, XVI p. 791, XVIII p. 169.1. *Pseudophacidium Smithianum* Boudier, Trans. Brit. Mycol. Soc. 5889

1908 v. III (1909) p. 81, tab. IV. — Minutum 0,30-0,31 mm. latum, primo endophyllum dein erumpens demumque liberum, sub-turbinatum, extus nigrum, glabrum, marginatum, margine primo dentato, intus cum hymenio olivaceum; paraphysibus simplicibus, tenuibus ad apicem vix incrassatis non v. ad summam basin divisis; ascis subcylindraceis, inferne paululatim attenuatis, inoperculatis, octosporis, 160-170 × 20; sporidiis ellipsoideis, apicibus obtusis, levibus, rectis v. leniter-curvulis, primo guttulis oleosis 1-2 p. cr. cum aliis minutissimis numerosis repletis, dein eguttulatis, 17-19 × 10-12, hyalinis v. pallidis.

Hab. ad folia *Empetri nigri*, Kilbirnie Ayrshire (D. A. BOYD) et Loch Alsh Rosshire (G. L. SMITH) Britannia.

PLACOGRAPHA Th. Fr. — Syll. XVIII p. 167.1. *Placographa mexicana* Rehm, Ann. Mycol. IV (1906) p. 337. — 5840

Ascomatibus primitus immersis, dein emergentibus, demum sessilibus, globoso-clausis, mox urceolatis, disco oblongo vel plerumque orbiculari, crasse irregulariter verrucoso-marginato, hyalino-flavidulo, demum interdum gyroso-plicatis, extus verruculosus, nigro-fuscis, 0,5-1,5 mm. diam., siccis plicatis vel corrugatis, ceraceis, excipulo crasso subfusco parenchymatico; ascis clavatis, apice rotundatis, 60-70 × 8, jodi ope nulla, octosporis; sporidiis oblongis, rectis, utrinque obtusis, 1-cellularibus, hyalinis, 8-10 × 3-3,5, distichis in superiore asci parte; paraphysibus filiformibus, septatis,

1,5 μ . cr., ad apicem multoties ramosis, 2 μ . cr., sordide flavidulis, epithecium crassum formantibus; hypothecio fuscidulo.

Hab. ad lignum putridum, New-Mexico Amer. bor. (SEEVER).
— Habitus fere cenangioideus; ad *Patinellam* tamen vergit.

ROBERTOMYCES Starb., Ascom. Schwed. Chaco-Cordill. Exped.; Arkiv. f. Bot., Bd. V (1905) pag. 5 (Etym. in honorem Doctorum ROB. et ROB. junioris FRIES). — Ascomata erumpentia, patellariacea, orbicularia, convexa, textura fuligineo-atrata, coriaceo-carbonacea, in juvenibus stratu superficiali textura erecta parallele prosenchymatica pallidiore. Asci in hoc stratu gignuntur; inter ascos evolutos restant reliquæ contextus prosenchymatici in epithecium globuloso-cellulosum, fuligineo-nigrum transeuntes. Sporidia hyalina, continua. Paraphyses nullæ. — Genus quoad locum in systemate dubium.

1. *Robertomyces mirabilis* Starb., l. c. p. 5; fig. 4 a-c. — Ascomati- 5841
bus gregariis, sæpe nonnullis confertis vel fere confluentibus, sessilibus, erumpentibus, peridermio relaxato irregulariter, orbiculariter, polygone vel elliptice determinatis, junioribus cinereo-albidis, tumidule nigro-marginatis, $\frac{1}{2}$ -1 mm. diam., demum crassioribus, totis nigris, usque ad 2 mm. diam.; contextu hypothecii parenchymatico coriaceo, partis parietalis excipuli densissime carbonaceo, partis hymenialis (ubi asci oriuntur), porrecto-prosenchymatico, cellulis minutis, pallidis; ascis octosporis, ellipsoideo-elongatis vel late cylindræis, sursum primo valde incrassatis, sessilibus, 101-127 \times 23-25; sporidiis hyalinis continuis, conglobatis vel distichis, ellipsoideis, sæpe inæquilateralibus, 28-32 \times 12-14; paraphysibus nullis; jodi ope ascis non cærulescentibus.

Hab. in ligno emortuo, Salta circa 100 m. supra oppidum et Jujuy, Santa Clara in ramulis aridis, in Argentina; in ramulis siccis Gourlieæ decorticatis (Papilionaceæ), Tarija et Soururo inter Tarija et Gran Chaco in Bolivia.

Sect. 2. Phæosporæ.

LAGERHEIMA Sacc. — Syll. X p. 55.

1. *Lagerheima pilosa* Syd., in De Wildem., Fl. Bas-Moy. Congo t. III, 5842 fasc. I (1909) Extr. p. 19. — Ascomatibus superficialibus, sparsis v. paucis aggregatis, planis, marginatis, sessilibus, atris, patellatis,

2-5 mm. latis, extus ad marginem rufo-brunneis et pilis rigidulis usque ad 250 μ . longis, 6-14 μ . cr. continuis, fuscis dense vestitis; ascis cylindræis, 70-90 \times 4-6, octosporis; sporidiis monostichis, ellipsoideis, continuis, obscure olivaceo-fuscis, 9-12 \times 4-5; paraphysibus copiosissimis, coalescentibus, asco longioribus, sursum usque ad 6 μ . incrassatis, flavis et epithecium efformantibus.

Hab. in ligno decorticato putri, Kisanu Congo, Afric. trop. (VANDERYST).

Sect. 3. Didymosporæ.

PATELLEA Fr. — Syll. VIII p. 783, XIV p. 820, XVIII p. 173.

1. *Patellea karschioides* Kirschst., Verh. Bot. Ver. Brandb. XLVIII 5843

(1906) p. 40. — Ascomatibus sparse gregariis, nigris, orbicularibus acute marginatis, basi in pedicellum brevem crassiusculum tenuatis, usque ad 1 mm. diam.; ascis cylindræo-clavatis in pedicellum brevem crassum angustatis, supra rotundatis, 38-48 \times 5-6, octosporis; sporidiis oblique monostichis v. distichis, ovoideis, hyalinis, rectis 4-6 \times 2-3; paraphysibus hyalinis filiformibus, continuis, supra globoso-incrassatis et summo apice obscure brunneis, 4 μ . cr., epithecium efformantibus; hypothecio brunneo.

Hab. in ligno udo pineo, Gebhardtshof prope Rathenow Germaniæ. — A ceteris speciebus forma paraphysium et minutie sporidiorum distincta.

KARSCHIA Körb. — Syll. VIII p. 729, X p. 56, XI p. 434, XIV p. 820, XVI p. 792, XVIII p. 176.

1. *Karschia Elasticæ* Koord., Botan. Untersuch. (1907) pag. 162. — 5844

Ascomatibus superficialibus, sessilibus, plano-patellatis, coriaceo-carbonaceis, atris, $\frac{1}{3}$ mm. diam., levibus; ascis clavatis, apice haud incrassatis, 3-8-sporis, paraphysatis, 33-35 \times 8,5-9; sporidiis 1-2-distichis, oblongis v. ovoideo-oblongis, 1-septatis, pallide fuscis, ad septum lenissime constrictis, 10-13,5 \times 3,5-5; paraphysibus simplicibus crassis in massam gelatinosam pallide flavescenscentem coalitis, apice incrassatis.

Hab. in cortice Fici elasticæ prope Karang-gajam prov. Kedu Java (KOORDERS).

Sect. 4. Phragmosporæ.

PATELLARIA Wahlenberg — Syll. VIII p. 786, X p. 61, XI p. 434, XVI p. 795, XVIII p. 179.

1. **Patellaria Theobromatis** d' Almeida et da Camara, Bol. Socied. Bro- 5845
teriana v. XXV (1908-1909) p. 240. — Ascomatibus sparsis, convexiusculis, nigricantibus, coriaceis, erumpenti-superficialibus, sessilibus, tenui-marginatis; ascis immaturis distincte claviformibus, maturis v. siccis subcylindraceis, valde paraphysatis, octosporis, 70-80 \times 10-17; sporidiis distichis, leviter clavulatis, griseis v. luteo-brunneis, quinque-septatis, non v. vix constrictis, 16-20 \times 5-7,
Hab. in cortice Theobromatis Cacao, in ins. St. Thomæ.

LECANIDION Rabenh. — Syll. VIII p. 795, X p. 60, XIV p. 821, XVI p. 796, XVIII p. 183.

1. **Lecanidion antarcticum** Speg. — Syll. VIII p. 798 — var. *durel-* 5846
loides Speg., Fungi Chilenses (1910) pag. 132. — A typo recedit ascomatibus in sicco, subhysterioides v. corrugatis; ascis sporidii-sque paullo majoribus (asci 80-90 \times 18; sporidia 30-45 \times 6-9).
Hab. in ramis emortuis Lobeliæ salicifoliæ, Cerro Alegre de Valparaiso Chile Amer. austr.

2. **Lecanidion Henningsii** (Ran.) Sacc. et Trott., *Patellaria Henningsii* 5847
Ranojevic, Ann. Mycol. VIII (1910) p. 354, fig. 19-21. — Ascomatibus crebre distributis, primum immersis hysterioides dein patentibus, demum superficialibus . . . ; ascis cylindraceis, clavatis, breviter pedicellatis, apice rotundatis, crasse tunicatis, 76-144 \times 10-13,5, octosporis; sporidiis distichis, clavato-elongatis, fusoides, rectis v. curvulis, 3-9- vulgo 5-7-septatis, 26-46 \times 5-7, hyalinis; paraphysibus septatis, supra furcatis et epithecium crassum brunneovirescens efformantibus, 1-1,5 μ . cr.; hypothecio hyalino v. brunneolo.

Hab. in caulibus siccis Verbasci phlomoidis prope Belgrad, Serbiæ. — A *Lec. Verbasci* bene distinctum.

3. **Lecanidion submacrosporum** (Rehm) Sacc. et Trott., *Patellaria sub-* 5848
macrospora Rehm, Ann. Mycol. V (1907) p. 535. — Ascomatibus dispersis, primitus innatis et globoso-clausis, dein sessilibus, patellaribus, distincte marginatis, orbicularibus, nigris, glabris, 0,3-0,4 mm. diam., coriaceis; ascis clavatis, apice rotundatis, 100 \times 14, octosporis, jodi ope nulla; sporidiis ellipsoideis, utrinque acutatis, re-

ctis, transverse 3-septatis, hyalinis, strato mucoso 4 μ . cr. obductis, 15-18 \times 6-7, distichis; paraphysibus dichotome ramosis, 2 μ . cr., ad apicem flavidulis; hypothecio subfusco; excipulo crasso, fusco, parenchymatico.

Hab. ad ramulum Juniperi in valle Venna montis Brenner alpium Tridentinarum ca. 1800 m. (Dr. REHM). — *Lec. macrosporo* affine, sed sporidia tantum 4-cellularia.

4. *Lecanidion paulistanum* Speg., Fungi in Paul. Rev. Mus. La Plata 5849 t. XV, p. 31. — Maculis nullis; ascomatibus patellaribus sessilibus dorso convexulis, nigris, disco planiusculo impressis, margine angusto acutiusculo calloso cinctis, intus albis, coriaceis, 0,5-1,5 \times 0,25-0,75 mm.; ascis e cylindraceo subclavulatis, apice subtruncato-rotundatis, postice attenuatis atque in pedicellum breviusculum productis, 99-100 \times 12-14, jodi ope leniter cærulescentibus; paraphysibus filiformibus paullo longioribus apice fusco-coalescentibus densis obvallatis; sporidiis rectis v. leniter curvulis utrinque obtuse acutatis 16-20 \times 4-6 triseptatis, ad septa constrictulis, loculis grosse uni-guttulatis, hyalinis.

Hab. ad ramulos emortuos arbusculæ ignatæ ejusdam, *Spiranga* Brasilia (USTERI).

STILBOPEZIZA Speg., Anal. Mus. Nac. Buenos Aires t. XVII (1908) p. 131 (Etym. *Stilbum* et *Peziza*). — Cenangioidea, erumpens, minuta, caespitosa, cupulis atris, cum strato conidiophoro Phæostilbum sistente commixtis. Asci fusoides, paraphysati; sporidia octona fusoides multiseptata, hyalina.

1. *Stilbopeziza Yerbæ* Speg., l. c. pag. 131, cum icon. — Stipitibus 5850 conidiophoris basi confluentibus atque subcylindraceis sursum applanatis, crispulis v. subramulosis 0,5-2,5 mm. alt., 0,15-0,25 mm. diam., atris subcarbonaceis fibroso-parenchymaticis sterilibus; ascomatibus constipatis sessilibus obsolete subiculigeris, hypothecio convexo sessilibus, epithecio concolori planiusculo margine acutiusculo nigro; ascis fusoides sursum obtusis tunica percrassa vestitis, breviter pedicellatis, octosporis, 100-110 \times 12-14; sporidiis oblique distichis elongato-ellipsoideis utrinque acutiusculis, 28-32 \times 5-6, leniter inæqualiter primo 10-12-blastis, serius 9-11-septulatis, ad septa non constrictis.

Hab. ad ramos dejectos putrescentes *Illicis* paraguariensis in silvis secus rivulum Matto Queimado Rep. Argentinae Amer. austr.

LEPTOPEZIZA Rostr. — Syll. VIII p. 794 (ut subgen.).

1. *Leptopeziza mindanaoensis* P. Henn., Hedw. XLVII (1908) p. 262. 5851
 — Ascomatibus superficialibus singularibus, rotundato-discoidæis, marginatis, atris, 1,5-2 mm. diam.; disco levi, atro; ascis fusoidæo-clavatis, apice attenuatis, obtuso-rotundatis, 130-150 \times 20-30, 8-sporis; paraphysibus superantibus, ramosis, septatis, hyalinis, 2 μ . cr. apice coalitis, fuscidulis; sporidiis subdistichis, oblonge fusoidæis, utrinque acutis v. obtusiusculis, 5-7-septatis, fuscis, 50-60 \times 10-12.

Hab. in Corticio ad ramos emortuos, Mindanao, Davao, Mt. Apo ins. Philippin. (COPELAND).

Sect. 5. Dictyosporæ.

BLITRYDIUM De Not. — Syll. VIII p. 802, XI p. 435, XIV p. 823, XVIII p. 185.

1. *Blitrydium* Mate Spegazz., Anal. Mus. Nac. Buenos Aires t. XVII 5852 (1908) pag. 132. — Ascomatibus cupulatis, margine obtusis 90 μ . diam., epithecio carnosulo olivaceo concaviusculo, contextu minute indistincteque subprosenchymatico, matrici dealbata leniter insculptis; ascis apice subtruncato-rotundatis basi abrupte rotundatis vix pedicellatis, 35-40 \times 8-10, octosporis, paraphysibus filiformibus longioribus obvallatis; sporidiis didymis ellipsoideo-subbiconoideis, non v. obsoletissime subclavulatis, 3-septatis, ad septum medium sat constrictulis, loculis mediis longitudinaliter divisis, hyalinis, loculis primo guttulatis dein granulosi, 12-14 \times 5-6.

Hab. ad ramos decorticatos emortuos Illicis paraguayensis circa San Pedro Rep. Argentina Amer. austr.

PLEIOPATELLA Rehm, Ann. Mycol. VI (1908) p. 314 (Etym. *pleios* plenior et *Patella*). — Ascomata sessilia, primitus clausa, dein urceolata, demum disco orbiculari plano patellari, crasse marginato, in stipitem crassum brevissimum elongata, atra, ceracea, hypothecio subfusco. Asci cylindracei, 1-spori. Sporidia oblongo-cylindracea, multoties longitudinaliter et transverse septata, hyalina. Paraphyses filiformes, versus apicem subfuscae et epithecium formantes. Hymenium jodi ope tinctum. — Ab affinibus *Pleiostrictide* et *Pleiostricta* recedit imprimis ascomatibus sessilibus, non erumpentibus etc.

1. *Pleiopatella Harperi* Rehm, Ann. Mycol. VI (1908) pag. 315. — 5353

Ascomatibus dispersis, haud perspicue erumpentibus, sessilibus, primitus globoso-clausis, dein urceolatis, disco demum patellari, orbiculari, crasse marginato, atris, 0,5-1,2 mm. diam., extus glabris, in stipitem crassum brevissimum elongatis, excipulo crasso parenchymatico fusco; ascis cylindraceis, apice rotundatis, c. 90×25 , monosporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, multoties transverse et horizontaliter septatis, hyalinis, $70-80 \times 18-22$; paraphysibus subconglutinatis, 0,3 μ . cr., versus apicem septatis et subfuscis, 5 μ . cr., cellulis ultimis 7-8 μ . long.; hypothecio fusco, hymenio jodi ope cæruleo tincto.

Hab. ad corticem Cupressi sp.? (*Cedar*), Longmires Springs Washington Amer. bor. (E. T. et S. A. HARPER).

TRYBLIDARIA Sacc. — Syll. VIII p. 805, XIV p. 33, XVIII p. 186.

1. *Tryblidaria argentinensis* Spegazz., An. Mus. Nac. Buenos Aires 5354

t. XIX (1909) p. 439. — Ascomatibus superficialibus primo hysteroideis dein patellari-apertis medio rimosi, margine elevatis aterrimis 0,5-2 mm. diam.; ascis linearibus basi pedicello crasso nodulosoque suffultis, $90-100 \times 12-14$, octosporis, paraphysatis; sporidiis oblique monostichis ex ellipsoideo lenissime obovatis, $16-18 \times 8-9$, sæpius 3-rarius 4-5-septatis, ad septa leniter constrictulis, loculo centrali supero septo altero verticali fere semper diviso, pallide olivaceis.

Hab. ad truncos decorticatos vetustos *Prosopidum* pr. Alto Grande, San Luis, Rep. Argentina America austr.

2. *Tryblidaria Garryæ* (Earle) Sacc. et Trott., *Tryblidium Garryæ* 5355

Earle, Bull. of the N. Y. Bot. Gard. (1904) p. 290. — Ascomatibus sparsis, subsuperficialibus, nigris, rugosis, patellatis, margine obscuris, 1 mm. circ. lat., 0,25 mm. cr.; ascis clavatis, longe stipitatis, circ. 120×8 ; paraphysibus filiformibus, supra ramosis; sporidiis subdistichis, primum 1-4-septatis et hyalinis, demum obscure brunneis, 10- v. ultra septatis, septis longitudinalibus etiam numerosis, plerumque curvulis, circ. 35×14 .

Hab. in ramis decorticatis *Garryæ* prope Stanford Univ. California Amer. bor. (C. F. BAKER).

3. *Tryblidaria patagonica* Spegazz., An. Mus. Nac. Buenos Aires 5356

t. XIX (1909) p. 440. — Peritheciis sparsis v. laxe gregariis primum hysteroideis mox patellari-apertis, nigris, parvis; ascis linearibus basi breviter crasseque pedicellatis $90-100 \times 10-20$, paraphy-

sibus apice ramosulis commixtis, octosporis; sporidiis ellipsoideis, sæpius distichis, 20-30 \approx 7-10, typice 24 \approx 8, transverse 5- longitudinaliter 1-septatis, olivaceis.

Hab. ad caudices aridos Verbenæ lignosæ ejusdam in Puerto San Antonio, Patagonia, America austr. — Cum *Tr. argentinensi* notis plurimis ad *Patellariam* vergit, peritheciorum juvenilium tamen fabrica ad interim huc inscribuntur. *T. subsidue* (C. et E.) Sacc. secundum descriptiones affines.

4. *Tryblidaria violascens* Rehm, Ann. Mycol. V (1907) pag. 532. — 5857
Ascomatibus gregariis, primitus cortici albi-lulo innatis, dein emergentibus, ab eoque crasse, demum rimose marginatis, orbicularibus, planis, disco atro, 0,3-1 mm. diam.; ascis clavatis, apice rotundatis, crasse tunicatis, ca. 150 \approx 40, bisporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, rectis, transverse ca. 23, longitudinaliter pluries septatis, inde dense muriformibus, primitus hyalinis, dein violaceis, 60-80 \approx 25, parallele positis; paraphysibus filiformibus, septatis, 1,5 μ ., versus apicem subramosis, 3 μ . cr., epithecium violaceum formantibus; hypothecio cum excipulo crasso flavo-fuscidulo, gonidiis nullis; jodi ope hymenio haud mutato, episporio vero obscurius tincto.

Hab. ad ramulum, Sao Paulo Brasiliæ (USTERI). — Cum *Tr. megalospora* et *Bombyliospora pachycarpa* (lichene) affinitate quadam devincitur.

5. *Tryblidaria roseo-atra* von Höhnelt, Stzb. k. Ak. d. Wiss. Wien, 5858
CXVIII, Abt. I (1909) pag. 347. — Ascomatibus erumpentibus, demum superficialibus, primum nigris dein discum roseo-carneum ostendentibus, subtus rugulosis supra convexiusculis, 0,5-1 mm. latis, plerumque in massas crustaceas usque ad 5 mm. latas gregarie diffluentibus; epithecio bistratoso; hypothecio 360-400 μ . cr. minute parenchymatico; ascis clavatis sessilibus, octosporis, supra rotundatis, 84-93 \approx 18-24; sporidiis distichis, hyalinis, tenuiter tunicatis, rectis v. curvulis variabilibus, plerumque elongato-fusoides apice obtusis v. rotundatis, transverse 5-7 longitudinaliter interrupte septatis, ad septa non constrictis, 26-31 \approx 8-9; paraphysibus indistincte filiformibus epithecio adnatis. J-.

Hab. ad basim ed in vaginis Sacchari Soltwedelii, Buitenzorg in ins. Java (RACIBORSKI).

Fam. 11. Caliciaceæ FR.

RÆSLERIA Thüm. et Pass. — Syll. VIII p. 826, XI p. 439.

1. *Ræsleria pallida* (Pers.) Sacc. — Syll. VIII, p. 826 — var. *fari-nacea* (Chev.) Sacc. et Trav. — Syll. XX, pag. 697 — *Coniocybe farinacea* Nyl. Syn. Lichen. pag. 163, t. V, f. 42. — Stipitibus firmioribus nigricantibus, capitulis majoribus albis differt a typo.

Hab. ad truncos vetustos Ulmorum et Æsculorum in regione Parisiensi et in Germania.

2. *Ræsleria Bubonis* (Rostr.) Sacc. et Trott., *Pilacre Bubonis* Rostr., 5860 Fungi Groenl. orient. in Meddel. om Groenl. XXX (1904) p. 114. — Stromatibus gregariis, stipitato-capitatis, albidis, 5-6 mm. altis, 1-2 mm. crassis; capitulo disciformi-depresso, levi, fusco; sporidiis ellipsoideis, 1-guttulatis, hyalinis, 5-6 \times 4.

Hab. in pilulis rejectis Strigum, Kap Dalton, Groenlandia.

ACOLIUM Ach. — Syll. VIII p. 839.

1. *Acolium sessile* (Pers.) Rehm, Krypt. Fl. III, p. 398 et p. 386, 5861 cum icon., *Acolium stigonellum* (Ach.) De Not. — Syll. VIII, p. 839. — *Calicium sessile* Pers. Tentam. disp. fung. suppl. pag. 59. — Ascomatibus gregariis sessilibus, primo globosis, clausis, disco rotundo plano-scutellato, tenui, sæpe albido-marginato, denique convexo et immarginato, asperulo præditis, deorsum leviter tenuatis, 0,3-1,2 mm. diam., nigris, subcorneis; ascis primo fusoides, tenuibus, breviter stipitatis, 45 \times 8-9, dein cylindræis et facile dilatantibus, 90 \times 9, quadri-octosporis; sporidiis ellipsoideis, constricto-didymis, grosse 2-guttatis, primo hyalinis, dein atro-brunneis, 12-15 \times 6-7, submonostichis; paraphysibus filiformibus, demum brunneolis.

Hab. ad thallum *Pertusariæ amaræ*, *P. communis*, *P. coccoidis*, *P. ceuthocarpæ*, rarius aliorum lichenum, ad cortices quercinos, pineos, fagineos etc. in Germania, Suecia, Helvetia.

Fam. 12. Arthoniaceæ REHM.

LECIDEOPSIS Almq. — Syll. X p. 76.

1. *Lecideopsis californica* Rehm, Ann. Mycol. VII (1909) p. 534. — 5862

Ascomatibus in cortice late dealbato dispersis, sessilibus, orbicularibus, subconvexulis, nigro-fuscis, 0,1-0,2 mm. diam., haud marginatis neque excipulo cinctis, siccis planis; ascis ovoideis, apice incrassatis, 30-35 \times 15, 8-sporis; sporidiis oblongo-clavatis, medio subconstrictis, utrinque obtusis, guttulis minutissimis repletis, hyalinis, 12-15 \times 5; paraphysibus conglutinatis, apice incrassatis, epithecium fusco-cæruleum formantibus; hypothecio hyalino sine gonidiis; jodii ope hymenio cæruleo-tincto.

Hab. ad caules emortuos *Baccharidis* vimineæ in montibus prope Claremont Calif. Amer. bor. (C. F. BAKER). — *L. galactiti* proxima.

2. *Lecideopsis* ? *cæruleo-atra* von Höhnelt, Fragm. Myk. VII (1909) 5863

in Sitzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I, pag. 880. — Ascomatibus immarginatis, nigro-opacis, hemisphaericis, superficialibus, 200-350 μ . lat., circ. 120 μ . cr., concentrice subcæspitosis v. gregariis, sæpe concretescentibus; excipulo nullo; contextu cartilagineo-gelatinoso, nigro-cyaneo; ascomatibus plectenchymaticis; hypothecio nigro-cyaneo usque ad 40 μ . cr., minute parenchymatico; paraphysibus radiatim dispositis simplicibus v. ramosulis, 4-5 μ . latis, distincte septatis, supra epithecium tenuem nigrum efformantibus; ascis octosporis, ex ovoideo subglobosis, basi in pedicellum filiformem 20-30 μ . long. abrupte contractis, crasse tunicatis, 50-60 \times 28; sporidiis conglobatis, bilocularibus, e hyalino lenissime brunneolis, elongato-ellipsoideis, ad septum vix constrictis, apice rotundatis, contentu granuloso, tenuiter tunicatis, extus mucosulis, 20-24 \times 7-8.

Hab. in cortice levi arborum, prope Buitaba Sao Paulo Brasilæ (WETTSTEIN et SCHIFFNER).

ARTHONIA Ach. — Syll. X p. 77.

1. *Arthonia punctiformis* Ach. — Syll. X, pag. 77 — var. *populina* 5864

(Mass.) Sacc. et Trav. — Syll. XX, pag. 1189, — *Arthonia populina* Mass., Ric. Lich. crust. pag. 50, fig. 91; Jatta Mon. Lich.

it. Merid. tab. VII, fig. 25. — Ascis 3-5-sporis; sporidiis quadriocularibus $15 \approx 3,6$.

Hab. in truncis et ramis Populi tremulæ in agro Veronensi Ital. sup.

ARTHOTHELIUM Mass. — Syll. X p. 77.

1. *Arthothelium atro-purpureum* Starb., Ascom. Regn. Exped. I, p. 9, 5865 t. I, f. 10, extr. — Ascomatibus in ligno dealbato laxè gregariis, primo immersis, dein erumpentibus, pulvinulatis, orbicularibus v. subellipticis, 0,3-0,5 mm. diam., 100-200 μ . alt., disco pulveraceo atro-purpureo v. subinde olivascens; ascis obpiriformibus, breviter noduloso-pedicellatis, apice rotundatis, crasse tunicatis, 50-63 \approx 30-35, octosporis, paraphysibus conglutinatissimè superne septatis obvallatis; sporidiis conglobatis oblongis utrinque obtuse rotundatis, 21-25 \approx 9-11, transverse 6-8-septatis, non constrictis, septis nonnullis longitrorsum partitis, hyalinis.

Hab. in ligno vetusto ad oppidum Bahia Brasilæ. — Gonidia nulla.

2. *Arthothelium laricinum* Rehm, in Jaap Ann. Mycol. VI (1908) 5866 p. 207 (nomen nudum).

Hab. in ramis emortuis Laricis deciduæ prope St. Ulrich Austriæ.

Fam. 13. Exoascaceæ SADEB.

EXOASCUS Fuck. — Syll. VIII p. 816, X p. 69, XI p. 435, XIV p. 823, XVI p. 803, XVIII p. 196.

1. *Exoascus nikkoensis* (Kus.) Sacc. et Trott., *Taphrina nikkoensis* 5867 Kus., Bot. Mag. Tokyo XXI (1907) p. 65, cum icon. — Mycelio subcuticulari plerumque hypophyllo; ascis cylindraceis v. leniter clavatis, apice rotundatis vel subtruncatis, 40-50 \approx 10-13, cellulis basilaribus rotundatis, 10-15 \approx 10-13, tunica tenuiori præditis; sporidiis globosis v. ellipsoideis, plerumque 8 in quoque asco, 5 μ . d. v. 7 \approx 4-5.

Hab. in foliis bullatis Aceris purpurascens, prope Nikko prov. Shimozuke Japonia.

2. *Exoascus Æsculi* (Ell. et Ev.) Flora Patterson, North Amer. p. 5868 ras. Exoasc. t. IV, f. 1, *Ascomyces deformans* var. *Æsculi* Ell. et Ev., N. Amer. Fungi n. 1887, *Taphrina Æsculi* (Ell. et Ev.)

Giesenhagen in Flora 81 (1895) pag. 358, f. 66. — Surculus et folia inficiens et subinde leviter torquens; maculis 2-5 mm. diam., flavidis, denique penetrantibus et matricis contextum rubefacientibus; ascis amphigenis, dense stipatis, utrinque rotundatis, 16-18 \times 7-9, cellula basali carentibus; sporidiis ellipsoideis, 6 \times 3, hyalinis.

Hab. in foliis surculisque *Æsculi californicæ* in California Amer. bor. (HARKNESS).

3. *Exoascus Bussei* v. Fab., Tropenpflanzen, Heft 11 (1907), *Taphrina* 5369 *Bussei* v. Faber in Arb. K. Biol. Anstalt Berlin, VI, Heft 3 (1908) cum icon. et VII (1909) p. 207-209, fig. 8. — Mycelio intracellulari; ascis 15-17 \times 5, octosporis; sporidiis ellipsoideis 2,5 \times 1,7; cladomanias, folia magnitudine minora reddendo, efformans.

Hab. in caulibus *Theobromæ Cacao*, Kamerun Africæ trop.

4. *Exoascus Piri* (Kusano) Sacc. et Trott., *Taphrina Piri* Kusano in 5370 Ann. Mycol. III (1905) p. 31. — Maculas in foliis flavidas, albu-pruinosas, subrotundas v. irregulares formans; mycelio subcuticulari, non permanenti; ascis cellula basilari carentibus, cylindraceis utrinque rotundato-truncatis, 29-42,5 \times 9-13; sporidiis globosis, 3-5 μ . diam.

Hab. in foliis *Piri Miyabei* Sarg., Nikko Japoniæ (KUSANO).

5. *Exoascus andinus* (Palm) Sacc. et Trott., *Taphrina andina* Palm, 5371 in Svensk Bot. Tidskr. III (1909) p. 193, fig. 1-5. — Maculas sæpe bullatas, indeterminatas, rubescentes efficiens; ascis epiphyllis v. hypophyllis, cylindraceis, apice rotundatis v. truncatis, 27-34 \times 9,5-13,6, cellula basilari cuboidea epidermidem non intrante, 9-13 \times 9-10; sporidiis octonis subglobosis, 4,5 \times 3,5, microsporibus globosis, minutissimis ascum omnino implentibus.

Hab. in foliis vivis *Pruni salicifoliæ*, Quito et Ambato Æquatoriæ (LAGERHEIM).

6. *Exoascus Sebastianæ* Sadeb. in Ber. Deut. Bot. Gesell. (1904) 5372 p. 119, t. IX. — Hypophyllus, pustuliformis, in epiphyllis maculiger, sæpe deformans; ascis dense parallele stipatis, valde polymorphis, modo anguste cylindraceis 70-80 \times 6-9, ima basi 2-3 μ . cr., modo clavatis et magis ludibundis, nunc clavatis, nunc oblongo-ellipsoideis apice rotundatis v. subtruncatis, 57-90 \times 9-20 (incl. cellula basilari); sporidiis octonis subinde senis v. septenis, monostichis v. distichis, in ascis cylindraceis apicem sæpius occupantibus, ovoideis v. ellipsoideis, 5,5-6,5 \times 4,5-5, hyalinis, intus nubilosis et 1-guttulatis.

Hab. in foliis *Sebastianæ brasiliensis*, Tubarao Brasiliæ (E. ULE). — Imprimis maxima ascorum variabilitate mox dignoscenda species.

7. *Exoascus Robinsonianus* (Giesenh.) Sacc. et Trott., *Taphrina Ro-* 5878
binsoniana Giesenhagen in Flora v. 81 (1895) p. 341-342, fig. 41, *Taphr. alnitorqua* Robins. non Tul. — Cfr. Ellis North Am. Fungi n. 796. — Mycelio hymenium compactiusculum subcuticulare gignente; ascis cellula basilari 15-17 \times 6-10 præditis, cylindraceis, apice subrotundatis, basi truncatis, 29-37 \times 6-10, pro more octosporis; sporidiis sphæroideis, 3,5-6 μ . diam., interdum in ipso asco germinantibus.

Hab. in carpellis quæ deformat, *Alni incanæ* in America boreali. — A speciebus alnicolis dignoscitur quia fructicola et matricem deformans, ascis cellula fulcrante præditis etc.

8. *Exoascus entomosporus* (Thaxt.) Sacc. et Trott., *Taphrina ento-* 5874
mospora Thaxter, Botan. Gazette, L (1910), p. 437, tab. XVIII, fig. 1-6 et p. 435, fig. 1. — Strato ascorum livide albido, totam paginam inferiorem folio occupante, ex mycelio inter cuticulam et epidermidem generato nascente; ascis dense confertis, subcylindricis, apice rotundatis v. subtruncatis, cellula basali latiore instructis, supra epidermidem positis; sporidiis entomomorphis, octonis, plasmate dense granuloso obscuratis, primum simplicibus, ovalibus, deinde appendiculatis; appendicibus biformibus, aliis utrinque terminalibus, rectis, cylindraceis v. subclavatis, aliis utrinque subterminalibus, plerumque quaternis, rigidis, tenuibus, divergentibus, subcurvatis, subattenuatis, subverticillatis; ascis 55-60 \times 13-15; sporidiis 9-10 \times 3-4; appendicibus terminalibus 8-12 \times 3,5, subterminalibus 15-25 \times 0,8.

Hab. in foliis vivis deformatis *Nothofagi antarcticæ* var. *bicrenatæ* et var. *uliginosæ*, Punta Arenas Patagoniæ, Amer. austr. — Species omnino peculiaris et potius genus propriam (*Entomospora* Sacc.) formans.

TAPHRINA Fr. — Syll. VIII p. 812, X p. 67, XI p. 437, XIV p. 824, XVI p. 1152, XVIII p. 197.

1. *Taphrina Kusanoi* Ikeno in Flora v. 92 (1903) p. 2-3, tab. 1-2, 5875
fig. 1 17. — Ascis hypophyllis, cellula fulcrante carentibus, cylindraceis, apice rotundatis deorsum leviter tenuatis, basique vero ima dilatatis, 102-117 \times 13-19, myriosporis; sporidiis (conidiis?) periziguis, ellipsoideis v. oblongis.

Hab. in foliis *Pasaniae cuspidatæ* in Japonia (KUSANO). —
Affinis Taphrinae Johansonii.

2. *Taphrina moriformis* Bubák, Bull. Herb. Boiss. 2 ser., VI (1906) 5876 p. 398. — Excrescentiis moriformibus, gibboso-foveolatis, 2-5 mm. diam., carnosus, obscure brunneo-purpurascens; ascis subcylindraceis 30-45 μ . long., apice 4-6 μ . latis, ibique tunica 2-3 μ . cr., basi angustioribus, pallide flavo-brunneis; sporidiis nondum evolutis.

Hab. in frondibus *Aspidii rigidi*, Njegos prope Cetinje Montenegro.

3. *Taphrina Mume* Nishida, Cfr. K. Yoshino, in Bot. Mag. Tokyo 5877 XIX (1905) p. (203).

Hab. in foliis *Pruni armeniacæ* var. *Ansu* in Japonia. —
 Diagnosin ab auctore obtinere non potui.

4. *Taphrina Hiratsukæ* Nishida, Cfr. K. Yoshino in Bot. Mag. Tokyo 5878 XIX (1905) p. (202).

Hab. in frondibus *Onocleæ* sp. in Japonia. — Diagnosin ab auctore consequi non potui.

Genus incertæ sedis.

ROLLANDINA Patouill. Bull. Soc. Mycol. Fr. (1905) p. 80, t. V (Etym. a cl. mycologo L. ROLLAND). — Receptaculum determinatum ex hyphis septatis, ramosis, pannoso-contextis formatum. Asci suboctospori, ovoideo-globosi, minuti, hyalini, dense glomerati: glomeruli numerosi sparsi, noduliformes, trama undique obvoluti. Sporidia lentiformia circulariter canaliculata, continua, hyalina. — Genus ab auctore *Gymnoascaceis* interim adscriptum, sed revera multum desciscit.

1. *Rollandina capitata* Patouill., l. c. p. 83, tab. V. — Albida, erecta, 5879 stipitato-capitata, 15-20 mm. alta, molliusculo-gossypina; stipite rigidulo, glabro, 1 mm. cr., cylindraceo, superne dilatato; capitulo subgloboso, 5-8 mm. lato, nodulis albidis 150-300 μ . cr.; ascis ovoideo-globosis, tenuiter tunicatis, sessilibus, 2-4-8-sporis, 8 \times 6; sporidiis lentiformibus, 2,5-3,5 μ . diam., levibus, circulariter canaliculatis.

Hab. ad quisquilias prope Bau-hau in regione Cai-Kinh Tonkini (L. BOULAN).

Fam. 14. Endomycetacæ SCHRÖT.

EREMASCUS Eid. — Syll. VIII p. 822.

1. *Eremascus fertilis* Stoppel, Flora XCVII (1907) p. 332. — Ascis 5380 sphaeroideis, 7-10 μ . diam. (ex icone), copiosissimis ex duarum hypharum contiguarum copulatione orientibus, octosporis; sporidiis tunica duplici præditis, ut ea *Saccharomycopsisidis* germinantibus, oblongo-ellipsoideis, sæpe subinaequilateris, 5,2 \approx 3.

Hab. in charta cum gelatina Mali et Ribis, loco frigido servata, in Germania.

ENDOMYCES Rees — Syll. VIII p. 821, X p. 70, XVI p. 1153, XVIII p. 202.

1. *Endomyces Mali* C. E. Lewis, Bull. Maine Agricult. Expt. St. 5381 n. 178 (1910) p. 63, fig. 58-71. — Mycelio ramoso, diffuso albido; conidiophoris brevibus, apice conidiis oblongis, subracemosis, levibus, hyalinis 8 \approx 3 coronatis; ascis plerumque ex ramulis brevibus lateralibus orientibus, globosis, 11-14 μ . diam.; sporidiis plerumque sphaericis v. sphaerico-oblongis, 5,5 \approx 4,5, maturis brunneis, levibus.

Hab. in fructibus putrescentibus Piri Mali quos valde vexat, Orono, Maine Americæ borealis. — Quoad culturam artefactam confer Lewis l. c.

2. ? *Endomyces Hylecæti* Neger, Ber. Deutsch. Bot. Gesell. XXVII 5382 (1909) p. 388, cum icone (absque diagnosi). — Tantum formæ conidicæ observatæ: acervulis albis subcaseosis; hyphis 10 μ . cr. repentibus septatis, hinc inde ramos conidiophoros erectos simplices v. apice brevissime ramulosos gerentibus; conidiis perfecte globosis, acrogenis v. pleurogenis, subsolitariis, crasse tunicatis, circ. 18 μ . diam. (ex icone); hyphis alteris in catenulas *Oosporæ* longas abeuntibus; articulis breviter cylindraceo-oblongis utrinque truncatis.

Hab. in « ambrosia » *Hylecæti* dermestoidis in truncis arborum frondosarum et coniferarum, in Germania. — Species quoad genus omnino dubia.

3. *Endomyces vernalis* Ludw., Centralbl. Bakt. X (1891) pag. 12 et 5383 Lehrb. nied. Krypt. p. 202, Lindner Kryptog. Fl. Brandb., Pilze I, p. 34, f. 15. — Hyphis mycelii parce ramosis, 3-4 μ . cr., initio

subiculum minutum, denique stratum plura centimetra extensum cremori simile ex albo rubescens. efformantibus; ascis rarioribus et ex mycelio dubie oriundis, subglobosis, $13-14 \approx 1.3$; sporidiis nondum bene observatis.

Hab. ex hypha scatente truncorum Betulæ et Carpini Betuli prope Greiz (LUDWIG) et Finkenkrug, Dessau etc. (LINDAU) sed mycelium tantum. In hoc observantur chlamydosporæ sphaericæ pleurogenæ et catenulæ oosporæformes acrogenæ.

4. *Endomyces javanensis* Klöcker, C. R. Trav. Labor. Carlsberg 5884 VII vol., 4 livr. (1909) p. 267, fig. 1-3. — Mycelio filiformi remote septato, in articulos cylindraceos facile secedente, hinc inde citriformiter inflato; cellulis citriformibus denique endosporas 1-2 generantibus; sporidiis seu endosporis ellipsoideo-globulosis, levissime depressis, asperulis, $3-4.5 \approx 2-3$, costula angustissima æquatoriali v. plus minus laterali percursis.

Hab. ad terram ex insula Java in Germaniam allatam, indeque variis in mediis facile cultus in instituto Carlsberg, Copenhagen. — Fermentationem non provocat.

5. *Endomyces fibuliger* Lindner, Wochenschr. f. Brauerei XXIV (1907) 5885 p. 469, Dombrowski W., in C. R. trav. Laborat. Carlsberg, VII, fasc. IV (1909) pp. 247-266, cum 10 fig. — Mycelio filiformi varie et parce ramoso, inæquali, tortuoso, fibulato-septato, ibique denticulato, cellulas globosas, leves, $15-16 \mu$. diam. ex denticulis generante; cellulis denique endosporas 3-4 gignentibus; sporidiis seu endosporis subhemisphaericis, levibus, $6-7 \mu$. latis, facie plana circumcirca marginulo emergente acuto ornatis, tunc faciem pileiformem induentibus; endosporis facile germinantibus et cellulas omino saccharomycetiformes gignentibus.

Hab. in pane, ubi fungillus maculas cretaceas fingeat, inde variis in mediis cultus in Dania et Germania. — Fermentationem provocat.

Fam. 15. Ascocorticiacæ SCHRÖT.

ASCOCORTICIUM Bref. — Syll. X p. 71, XVIII p. 198.

1. *Ascocorticium albidum* Bref. — Syll. X, p. 41 — var. *aphthosum* 5886 B. R. S. in Saccardo, Not. Myc. VI, Ann. Myc. vol. III (1905) pag. 506. — Effusum, sparsum v. confluens, submembranaceum,

lenticulare, $\frac{1}{3}$ - $\frac{3}{4}$ mm., cinereum, margine pallidiore; ascis sessilibus, verticaliter stipatis, aparaphysatis, ellipsoideo-oblongis, octo-sporis; sporidiis hyalinis, ellipsoideis, $6 \approx 2,5$.

Hab. in cortice interiore Pini silvestris, Westmalle, Belgii.

Fam. 2. Atichiaceæ MILLARDET (*).

(Seuratiaceæ Vuill.).

ATICHIA Flot. in Linnæa XXIII (1850) p. 149, Rehm Disc. p. 500 (Etym. *a* priv. et *theicos* paries h. e. excipulum nullum). — Characteres fam. et gen. Thallus gelatinosus subrotundus, pro more laciniato-ramosus, sæpe stellato-ramosus, nigricans, applanatus, intus albidus; contextu ex cellulis gemmantibus mucro immersis, dein in catenas junctis formato, cellulis superficialibus saturatius coloratis, rugulosis. Asci sub thalli superficie v. inferius in glomerulos dispositi, suboctospori; sporidia typice bilocularia, hyalina v. fuscella.

1. **Atichia glomerulosa** (Ach.) Flot. Linnæa XXIII (1850) pag. 149, 5887 Rehm, Discom. p. 500, *Atichia Mosigii* Flot. l. c. p. 150, *Hyphodictyon lichenoides* Millard., Act. Soc. helv. Sc. nat. (1866), *Collema glomerulosum* Ach. Lich. univ. p. 641 (1810). — Thallis basi contracta sessilibus, depresso globulosis atro-brunneis, profunde divisis, subinde dichotomice partitis, apicibus acutis, 2-4 mm. lat., 1 mm. alt. ex cellulis inæqualiter globulosis, hyalinis, massa gelatinosa obvolutis constantibus, superficie cellulis breviter pedicellatis, copiosis, subrotundis, atro-brunneis, applanatis v. convexis, ad medium sensim collabascens et pallidis marginatis, extimis (conidiis?) globoso-ellipsoideis 4 μ . lat., seriatis; ? ascis clavatis 6-sporis; sporidiis

(*) De hoc singulari et ancipiti familiola cfr. v. Höhnelt « *Atichia Treubii* Saccharomyc. » in Annal. du Jardin Bot. de Buitenzorg, 2 sér. III suppl. (1909) p. 19. Quomodo prof. v. Höhnelt hos fungillos nigricantes, epiphyticos, fere capnodiaceos ad Saccharomycetes possit referre, me omnino latet. — Genera *Heterobotrys* Saco. et forte quoque *Actinomma* Saco. sunt verisimiliter *Atichia* species tantum conidiophoræ, quarum ascis nondum innotuerunt. Mea *Heterobotrys paradoxo* (Cfr. Fungi ital. t. 807) omnino congruit cum *Seuratia Tonduzi* Mang. et Pat. Comptes rendus des séances de l'Acad. des Scienc. Paris (1912) t. 151, p. 1476, fig. I-II.

subfusoides, 1-2-cellularibus, 11-15 \approx 4-5, guttulis binis valde refringentibus fœtis.

Hab. in foliis ramisque Pinorum, Abietum, Tiliæ, Visci in Lusatiæ, Germaniæ pluribus locis. Descriptio ascorum cum sporidiis est deprompta a cl. Millardetio, qui vero apotheciis 60-90 μ . diam. in *Atichia* parasiticis pertinere censet. Sec. von Höhnelt *At.* (*Seuratia*) *pinicola* huc pertinet.

2. *Atichia Treubii* v. Höhn. in Ann. Jard. botan. de Buitenzorg II 5889 sér., III suppl. p. 27. — Thallis superficialibus sparsis v. gregaris, globoso-tuberoideis, 150-400 μ . diam., subinde laciniatis, pro more seriatis v. seriato-stellatis, mollibus, gelatinosis, siccis appianatis, nigricantibus, udis olivaceo-brunneis, subdiaphanis; contextu interiore hyalino ex cellulis versiformibus ellipsoideis v. citrifor-mibus v. angulosis, reticulato-catenulatis, continuis v. isthmico-con-nexis, 5-8 μ . long. efformato; cellulis superficialibus globoso-elli-psoideis, laxioribus, 3-5 μ . diam., extus saturate coloratis; ascis sparsis v. in greges minulos sub superficie dispositis, ovoideis, basi apiculatis, crasse tunicatis, octosporis, 32 \approx 25, apophysatis; spo-ridiis conglobatis, bicellularibus, ovoideis, diu hyalinis, demum brun-neolis, muco obvolutis, crasse tunicatis, 16-18 \approx 9-10, cellula sup. sæpius leviter crassiore; conidiis in thallo proprio oriundis, subsu-perficialibus, globoso-ovoideis, brunneolis, 3-4 μ . diam.

Hab. in foliis vivis Fici elasticæ in horto montano Tijbo-das ins. Javæ.

3. *Atichia pinicola* (P. Vuill.) Sacc. et Trott., *Seuratia pinicola* P. 5889 Vuill. Bull. Soc. mycol. Fr. (1905) p. 74, t. IV. — Disciformis, mucilaginea, separabilis, extus nigricans, cuticula tenuissima, vix 0,4 mm. cr. tecta, intus plus minus vesiculosa, hyalina, vesiculis sphæ-roideis usque ad 8 μ . diam., inter se isthmis cylindræis brevibus connexis, denique in chlamidosporas transmutatis et tunc 10 μ . diam., membrana 1,5 μ . cr. tectis; ascis intermixtis octosporis glo-bosis, dein subpiriformibus, hyalinis, 22-23 μ . diam. vel 24-27 \approx 10-13; sporidiis didymo-constrictis, hyalinis, 10-11 \approx 6, loculo su-periore interdum paullo ampliore.

Hab. in ramis cancerosis Pini halepensis, Soubès Galliæ. — Sec. v. Höhnelt species hæc collideret cum *Atichia glomerulosa*.

4. *Atichia Vanillæ* (Pat.) v. Höhn., l. c. pag. 27 (ex errore « *vanilli-* 5890 *cola* »), *Seuratia Vanillæ* Pat., Bull. Soc. Myc. de France XXII (1906) p. 54, fig. 4. — Ascomatibus globosis circiter 600 μ . diam., gelatinosis, astomis, fusco-brunneis, gregaris v. solitariis, rarius

confluentibus, ex hyphis moniliformibus gelatinosis hyalinis (articulis 6-15 μ . long.) compositis; ascis oyoideis 40-50 \approx 30; sporidiis hyalinis, ellipsoideis, medio septatis constrictisque, 19-20 \approx 14, intus guttulatis.

Hab. in foliis languidis *Vanillæ planifoliæ*, Tahiti Polynesia. — *S. coffeicolæ* Pat. affinis.

5. *Atichia Millardeti* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 369. 5891

Thallo sessili, 3-14 mm. lato, nigro, polypoideo, appanato, radiatim fisso, libero, ramis modo brevioribus modo longioribus: brevioribus, sectione ovata v. rotunda indivisis, longioribus inæqualiter digitatis v. duplicato digitatis, gelatinosis, ex cellulis inflatis hyphas ramosas rosulatas formantibus contextis; fungi superficie verrucosa atro-brunnea, parte interiore late brunnea; tuberculis in thalli superficie pulvinatis, 150-260 μ . lat., 120 μ . alt., subrotundis, brunneo corticatis et asperulis, intus ascigeris; ascis stratosi paraphysatis ad hyphas lateraliter insertis, denique cortice disrupto emergentibus, crasse tunicatis, late ovatis basim versus tenuatis 60 \approx 35, octosporis; sporidiis bicellularibus, oyoideis, brunneo-tunicatis, levibus, utrinque rotundatis, medio constrictis, 16-19 \approx 7-9, mucro immersis.

Hab. in foliis *Syzygii jambolani*, *Cinnamomi zeylanici*, *Coffeæ arabicæ*, *Anacardii occidentalis*, *Styracis Benzoin*, præcipue in hortis Tjikemeuh Buitenzorg Javæ.

Fam. 17. Saccharomycetaceæ REES (*).

SACCHAROMYCES Meyen — Syll. VIII p. 916, XI p. 437, XIV p. 828, XVI p. 818, XVIII p. 198.

1. *Saccharomyces Würtzii* Boutroux in Ann. Sc. nat. ser. VI 17 (1884) 5892 n. XVIII, p. 197 et pag. 200, t. XVI, f. 42-46. — Tenuissime

(*) De biologia et morphologia hujus familiæ multæ et graves dissertationes nuper prodierunt sed multum adhuc inquirendi reliquum est. Profecto hic essent referenda genera et species tantum ascophora, hinc gen. *Mycoderma*, *Cryptococcus* etc. essent excludenda, tamen ob vegetationis notas et habitum consimilem hic recensui. Ubique studiosus fontes descriptionum conferre debet, nam hic perpaucas tantum notas morphologicas at nullas physio-chemicas afferre potui.

pelliculosus, liquidum non obturbans; cellulis liberis v. aggregatis, globosis v. subglobosis, guttulas 1-2 majusculas, chlorino-brunneolas foveantibus, serius subirregularibus et guttulas minores includentibus.

Hab. in floribus, fructibus maturis e. g. Ribis, Vitis etc. et in Apibus in Gallia.

2. *Saccharomyces cirratus* Boutr. in Ann. Sc. Nat. sér. VI, 17 (1884) 5893 n. XIII, p. 190 et p. 200, t. XV, f. 32-33. — Tenuissime pelliculoso-flocculosus, intra liquidum conspicue floccosus, sed non obturbans; cellulis junioribus in greges majusculos confertis, circumcirca hyphas radiatim dispositas, cylindraceas, articulatas, interdum ramosas et tortuosas proferentibus, ellipsoideis v. globosis, sæpe breviter catenulatis, hyalinis, contentu homogeneo.

Hab. in floribus Petasitis, Ericæ, Nonneæ, Borriginis, in fructibus immaturis Ribis, in Apibus et Bombis etc. in Gallia. — An potius forma *Oosporæ* (*Sachsiae*)?

3. *Saccharomyces Pseudomycoderma* Boutroux, in Ann. Sc. nat., sér. 5894 VI, 17 (1884) pag. 191, n. XIV et p. 200, t. XV, f. 34 et XVI, f. 35. — Mycelio (culto in musto) membraniformi, albo, densiusculo, ut *S. Mycoderma*; cellulis proteiformibus et magnitudine et dispositione variis, junioribus ellipsoideis, minutis, denique amplioribus, catenulatis vel non, subinde multo longioribus cylindraceis, nucleolis in quoque articulo singulis valde refringentibus.

Hab. frequenter in floribus et fructibus Sedi, Rhois, Rubi, Ribis etc. nec non in insectis Apibus, Muscis, Cetonia in Gallia. — An genuina *Saccharomycetis* species? An potius *Oosporæ* (*Sachsiae*) forma?

4. *Saccharomyces Rouxii* Boutr. Ann. Sc. Nat. sér. VI, 17 (1884) 5895 pag. 196, n. XVII et 200, t. IV, fig. 4, t. V, fig. 8 a-b. — Tenuissime pelliculosus, intra liquidum vix flocculosus, diaphanus; cellulis globosis v. ovoideis, vere regularibus, enucleatis, breviter catenulatis, apice proliferantibus.

Hab. in syrupis, confecturis atque in glycosio solido in Gallia.

5. *Saccharomyces monacensis* Hans., C. R. Trav. Laboratoire d. 5896 Carlsberg VII (1908) fasc. III, p. 196, fig. 6-9 (absque diagn.). — A *Sacch. carlsbergensi* Hans. differt præcipue quod temperie humiliori (1°-9°C.) ejus coloniæ e cellulis ellipsoideis v. sphæroideis constitutæ prævalent præ coloniis myceliis.

Hab. in fermentatione Cerevisiæ « *levure basse de Carlsberg* » dicta et in fermentatione Cerevisiæ Monacensi frequens.

6. **Saccharomyces carlsbergensis** Hans, C. R. Trav. Laboratoire d. 5897 Carlsberg VII (1908) fasc. III, p. 188, fig. 1-5, 10 (absque diagn.). Cellulis variabilibus, ellipsoideis, ovoideis, piriformibus vel etiam subglobosis, cellulis giganteis nonnullis immixtis; temperatura germin. inter 0°C. et 33,5°C.; temperatura 0°C-9°C promovet coloniam mycelicam subtorulosam, temperatura superiore solum cellulas gemmantes favet; ascosporæ raro occurrunt.

Hab. in fermentatione Cerevisiæ « *levure basse de Carlsberg* » dicta.

7. **Saccharomyces Pasteurianus** Rees — Syll. VIII, pag. 917. — Ut ejus formæ II et III citandi sunt **Sacc. intermedius** Hans. ap. Lindner Krypt. Fl. Brandenb. VII, p. 10, f. 2 et **Sacc. validus** Hans. ap. Lindn. l. c. fig. 1, qui non in vino sed in cerevisia evolvuntur et eam in fermentationem inducunt.

8. **Saccharomyces ellipsoideus** Rees — Syll. VIII, p. 917. — Ut ejus forma II, nempe non in vino sed in cerevisia oriens eamque obturbans et vexans pertinet **Saccharomyces turbidans** Hans. ap. Lindner Krypt. Fl. Brandenb. VII, p. 11, f. 2.

9. **Saccharomyces Batatæ** Saito in Centralbl. Bakter. XVIII (1907) 5900 p. 35, t. II, f. 19-21. — Cellulis forma et magnitudine ludibundis, 3-10 μ . diam., sphaeroideo-ovatis v. subinde ellipsoideo-oblongis, 10-12 \times 4-6, in cultura magis elongatis et longè catenulatis; ascis 1-4-sporis, sæpius 2-3-sporis; sporidiis sphaeroideis, rarius subovoideis, 2-4 μ . diam., sæpius 3-4 μ .

Hab. in liquore, quem generat, Moromi dicto, e radicibus Batatæ extracto, in insula Hachijo Japoniæ.

10. **Saccharomyces Tokyo** Nakazawa, Centralbl. f. Bakter. etc. II 5901 Abt. XXII (1909) p. 540, fig. 1, 3, 5, 7. — Cellulis nunc globosis et 1,2-3,2 μ . diam. nunc subellipsoideis et 3-14 \times 2-9; cellulis giganteis plerumque ovoideis v. piriformibus; plasmate homogeneo v. modice granuloso; endosporis usque ad 4 in quoqueasco; temperatura sporificationis 10°-35°C., optimum 31°C.

Hab. in liquore Saké in quo fermentationem alcoholicam inducit, in Japonia.

11. **Saccharomyces Yedo** Nakazawa, Centralbl. f. Bakter. etc. II Abt. 5902 XXII (1909) p. 540, fig. 2, 4, 6, 8. — Cellulis globosis 3,2-6,4, ellipsoideis, subellipsoideis et suballantoideis 4,5-20,8 \times 3,2-7,2; cellulis giganteis plerumque ovoideis, piriformibus; plasmate homo-

geneo v. modice granuloso; endosporis usque ad 4 in quoque asco temperatura sporificationis 10°-35°C., optimum 31°C.

Hab. in liquore Saké in quo fermentationem alcoholicam inducit, in Japonia.

12. *Saccharomyces orientalis* Beijer. in Centr. Bakt. II Abt, IV (1898) 5908 p. 725, t. XII, f. 5-6. — Cellulis subsolitariis, ellipsoideis, v. ovoideis v. oblongo-ovoides, 4,5-7 \approx 4-4,5 parçe guttulatis; cellulis endosporeis (ascis) subglobosis, 6-7 μ . diam., plerumque 2-3-sporis; sporidiis globosis v. e mutua pressione paullulum depressis, 3-3,5 μ . diam.

Hab. ex fermento Koji albo dicto ex Japonia (EYKMAN) dein in musto cerevisiæ cultus. — Expositio auctoris tantum biologica. Notas ex iconibus eruimus.

13. *Saccharomyces Sojæ* Saito, Bot. Mag. Tokyo XIX (1905), n. 222, 5904 p. 76 et in Centralbl. für Bakter. II Abt. XVII (1907) p. 104, fig. 4 et 8 a. — Cellulis sphæroideis v. ovoideis, crassiuscule tunicatis, 4-8 μ . diam., contentu homogeneo vacuolis majusculis prædito; sporidiis quaternis, rarius singulis, globosis, 2,7-4,5 μ . diam., intus minutissime granulosi.

Hab. in fermento Sojæ in Japonia.

14. *Saccharomyces uvarum* Beijer. in Centralbl. Bakter. II Abt, IV 5905 (1898) p. 725, t. XII, f. 3-4. — Cellulis ellipsoideis v. globoso-ellipsoideis, 5,6 μ . diam. vel 8-9 \approx 5, minute pluri-guttulatis, solitariis; cellulis endosporeis (ascis) plerumque globosis, pro more 4-sporis; sporidiis sphæricis, 1,7 μ . diam.

Hab. in succo baccarum Ribis (*Johannisbeerensaft*) in Hollandia deinceps in *Agar* cultus. — Expositio auctoris tantum biologica; notas ex iconibus eruimus.

15. *Saccharomyces coreanus* Saito, Centralbl. f. Bakt. II Abt. XXVI 5906 (1910) pag. 371, f. 1. — Cellulis subglobosis ovoideis v. breviter allantoideis, crassiuscule tunicatis, 3-7 μ . diam., raro gemmiferis, sæpius solitariis; endosporis binis v. quaternis subglobosis 2-3,5 μ . diam., facile gignentibus; in glycosium, saccharosium fermentationem inducens, non vero in maltosium; optimum temperiei pro germinatione 37°C., pro sporificatione 32-34°C.

Hab. in fermento sic dicto sinensi in Corea. — Affinis *Sacch. Marxiano* a quo differt quia in inulinum fermentationem non inducit. Utitur ad panem paniceum et spelteum conficendum. — Var. major K. Saito l. c. p. 374, fig. 2. — Differt cellulis majoribus, 8-12 μ . diam., sporidiis etiam majoribus, 3-4 μ . diam.

16. *Saccharomyces Allii* Sorok. apud Sorauer Atlas Pflanzenkr. t. XIX, 5907 f. 1-2. — Cellulis forma et magnitudine variabilibus, 3-15 μ 3, cito se multiplicantibus, sed tertia die fatiscentibus (ob. evolutionem Bacteriorum?).

Hab. in squamis junioribus bulbi *Alli Cepæ* in Russia, æstate humida (SOROKINE). — Inter squamas imprimis ad centrum bulbi initio efformantur guttulæ gelatinosæ, albæ, omnino ex cellulis *Saccharomycetis* constantes et bulbos, fermentescendo, in pulvem mucosam flavam postremo mutantes. Bacteria quoque bulbis morbum afferunt sed sæpe sine *Saccharomycete*, hinc bacteriosis est infectio propria.

17. *Saccharomyces Brassicæ* Wehmer in Centralbl. Bakter. II Abt. 5908 XIV(1905) p. 783, t. II, p. 68. — Cellulis globoso-oblongis, parum extensis, minutis, vix 6 \approx 4-5, interdum (in culturis) minoribus; sporidiis adhuc non observatis; in succo *Brassicæ oleracæ* fermentationem fervidam generat.

Hab. in caulibus (*Brassicæ*) salitis (*Sauerkraut*) in Germania alibique in officinis. — Cl. Auctor distinguit in eadem matrice quoque formam II (fig. 7): cellulis jugiter globosis, 3,6-4,8 μ . diam., interdum minoribus, nucleolis minutis fortiter refringentibus fæctis; et III (fig. 8) cellulis, ellipsoideis paullo longius extensis, numquam globosis. Utraque quoque in officinis *Brassicæ* salitæ.

18. *Saccharomyces javanicus* Kruyff, Centralbl. f. Bakter. etc. II 5909 Abt. XXI (1908) p. 618. — Cellulis ellipsoideis, 10-12 \approx 6-8; pro evolutione optimum temperaturæ 37°C., maximum 41°C.

Hab. frequens ad folia arborum plurimarum in ins. Java. — Inducit fermentationem alcoholicam in glycosio, saccharosio et maltosio. Speciei præsentis auctor sex formas alias distinguit, de quibus cfr. l. c.

19. *Saccharomyces sardous* Grixoni, Nuovo latte fermentato facile a 5910 prepararsi, in Ann. della medicina navale, vol. II, fasc. 3 (1905). — Cellulis aërobiis, initio globosis 3 μ . diam., demum ovoideis 8 μ . longis, apice gemmiparis, tunica duplici præditis, intus granulosi, temp. 20-25°C. ascosporas gignentibus.

Hab. in lacte in quo fermentationem peculiarem inducit. — Apud sardos vulgo *Gioddù* audit et jamdudum bene utitur. Ex eodem lacte fermentescente auctor eduxit *Bacillum* proprium, quem *B. sardoum* nuncupavit.

20. *Saccharomyces Cicadarum* K. Sulc in Sitzungsab. K. Böhm. Ge- 5911

sellsch. d. Wiss. Prag (1910) pag. 2, c. fig. (extr.) (*). — Cellulis non germinantibus solitariis, elongatis, $10-12 \approx 2-3$, subinde longioribus, utrinque obtusulis; germinantibus inæqualiter oblongo-fusoideis, uno apice longe sensim tenuatis, fere cuspidatis, tunica tenui præditis, minute nucleolatis, ad apices attenuatos cellulas filias, subinde 2-5 inter se connexas gemmiparitate generantibus; cellularum seriebus interdum usque ad 60 μ . longis.

Hab. intra larvas Cicadæ (Tettigiæ) Orni in Bohemia.

21. **Saccharomyces Conomeli-limbati** Karel Sulc, l. c. pag. 18, fig. X, 5912 extr. — Cellulis ellipsoideis v. ovoideis, minutissimis, utrinque subrotundatis, $3 \approx 1$, uno polo apiculatis, altero cellulam filiam gemmipare exerentibus, plasma granulosum nucleumque globulosum continentibus, non catenatis.

Hab. in hæmolympa Conomeli limbati ex Homopteris in Bohemia.

22. **Saccharomyces Macropsidis-lanionis** Karel Sulc, l. c. p. 17, f. IX 5913 extr. — Cellulis fusoides v. oblongo-fusoideis, utrinque acutulis v. hinc subrotundatis, uno polo leviter apiculatis, altero cellulam filiam gemmipare exerentibus, plasma granulosum et nucleum continentibus, minutis, $3 \approx 1$, non catenatis.

Hab. in hæmolympa larvæ Macropsidis lanionis ex Cicadinis, in Bohemia.

23. **Saccharomyces symbioticus** G. Teodoro, in Atti Accad. Sc. ve. 5914 neto-trent-istr. Padova V (1912) p. 13. — Cellulis ovoideis uno apice tenuatis, $8-10 \approx 3-4$, plasmate continuo v. granuloso, hinc v. utrinque gemmantibus; gemmulis primo globulosis demum in formam cellulæ matris mutatis.

Hab. in hæmolympa Lecanii Oleæ ♀ et Pulvinariæ camelicolæ ♀, Padova. — Teste auctore species valde accedit ad *Saccharom. apiculatum* var. *parasiticum* Lindner in Centralbl. f. Bakt. II Abt. (1895) p. 785, c. ic. lectus in Aspidioto Nerii ad folia Myrti, Berolini.

24. **Saccharomyces Anobii** Buchner, Stud. intracell. Symbiont. in 5915

(*) Quoad genera et species plus v. minus genuinas Saccharomycetum intra cellulas corporis insectorum quorundam et præsertim Hemipterorum symbiotice parasitantes conferenda sunt commentaria oll. K. SULC, U. PIERANTONI, P. BUCHNER etc. Hic ex diagnosis plerumque imperfectis auctorum notas vix sufficientes rettuli.

Arch. Protistk. Jena (1912) p. 104, f. 29. — Cellulis piriformibus, interdum curvulis, vacuolatis; mycelio (in culturis) moniliformi, ramuloso, cellulis ovato-oblongis, crasse guttulato-vacuolatis.

Hab. in cellulis intestinalibus *Anobii panicei* in Germania.

25. *Saccharomyces Anguillulæ* Dang., Le Botaniste, X (1907) p. 73, 5916 t V, f. 5-10. — Cellulis oblongo-ellipsoideis, utrinque rotundatis, æqualibus, 3-8 in catenulas dispositis et facile secedentibus, plerumque nucleo unico (raro binis) nucleolato præditis, præterea granulosis vacuolatisque (mensuris non indicatis).

Hab. intra corpus *Anguillulæ* in Gallia.

26. *Saccharomyces granulatus* Vuill. in Guéguen Champ. paras. 5917 p. 104, fig. 4. — Cellulis ovoideis v. ellipsoideis, interdum globulosis v. oblongis, 2-10 μ . long., plerumque 4-5 \times 3-4, tunica verruculis solitariis v. regulariter seriatis conspersa præditis, gemmulam unicam, raro 2-3 formantibus, guttulasque oleosas roseas, culturâ rubras fœventibus; cellulis (ascis) tunica tenuiori præditis, levibus, sporidia 2-4 sphaerica v. ellipsoidea fœventibus.

Hab. in hæmatomate ossis maxillaris inf. hominis in Gallia. Quoad notas biologicas et pathologicas cfr. Guéguen l. c.

27. *Saccharomyces tumefaciens* (Curtis) Busse in Guéguen, Champ. 5918 paras. p. 104, fig. 3. — Cellulis sphaericis, interdum ovoideis germinando 40 μ ., protoplasma granulosum 16-20 μ . diam. fœventibus, tunica 0,5 μ . cr.; capsula gelatinosa 8-10 μ . cr.

Hab. in tumoribus et abscessibus hominis in Gallia. — Pathogenus in mure, cane, cavia etc. Quoad charact. biolog. et pathol. cfr. Guéguen l. c.

28. *Saccharomyces anginae* Vuill. in Guéguen, Champ. paras. p. 103, 5919 fig. 2. — Cellulis ovoideis, 8-9 \times 5-6, solitariis v. per 8-10 aggregatis, sæpe uno apice germinantibus; cellulis (ascis) [in cultura] tetrasporis; sporidiis per tetrades v. seriatim dispositis, subrotundis, 2 μ . diam.

Hab. in partibus angina correptis hominis in Gallia. — Morbi causa certa videtur. Characteres biologicos vide ap. Guéguen l. c.

29. *Saccharomyces Blanchardi* Guiart in Coupin, Champ. parasit., 5920 t. XXVIII, f. 1-5, *Sacch. de Blanchard* etc. Guéguen, Champ. paras. p. 105. — Cellulis sphaericis 1,5 μ . subinde usque ad 15-20 μ . diam., plasmate diaphano vix granuloso, viridulo faretis, nucleo nullo manifesto, tunica crassiuscula zonaque v. capsula mucosa diametrum cellulae æquante præditis, gemmulis sæpe geminatis.

Hab. in massa glareosa peritonei hominis ægroti in Gallia.

30. *Saccharomyces membranogenes* Steinhaus, Centralbl. f. Bakt. 5921

I Abt. XLIII (1907) p. 49. — Cellulis sphaericis, 6-7 μ . diam., germinationis ope sæpius piriformibus v. clavatis et demum, more solito, constrictionis ope cellulas filias generantibus vel hinc inde e peripheria gemmulas procreantibus; plasmate minute granuloso, corpuscula 1-2 v. plura refringentia continente.

Hab. in membrana tracheali pueri *scarlatina* laborantis in Germania. — Cultus capsulas non format, sed easdem profert in animalibus artificiose infectis.

CRYPTOCOCCUS Kütz. in Linnæa VIII (1833) p. 365, em. Vuill. et Guéguen, Champ. paras. pag. 106, *Atelosaccharomyces* Beurm. et Goug. (1910) (Ety. *cryptos* abditus et *coccus* pro semen seu spora). — Genus temporarie colligit *Saccharomycetis* species ascis (hucusque) ignotis (*).

1. *Cryptococcus degenerans* (Roncali) Vuill. in Guég., l. c. p. 107, 5922 f. 6. — Cellulis subrotundis, rarius ovoideis, v. reniformibus, tunica tenui demum spissa; protoplasmate initio refringente et homogeneo, postremo vacuolato et parce granuloso.

Hab. in gangliis axillaribus feminae cancro mamillari affectæ inque aliis tumoribus in Italia, Gallia (RONCALI). — Quoad notas biologicas et pathologicas cfr. Guéguen l. c.

2. *Cryptococcus Costantini* Guéguen, Champ. paras. p. 114, *Saccharomyces hominis* Cost. — 5923 Cellulis globosis; a *Crypt. lithogene* dignoscitur coloniis senescendo non brunnescentibus et a *Crypt. tumefaciente* tunicis in mediis communibus non se incrassantibus.

Hab. in carcinomate mamillari feminae in Gallia (COSTANTIN).

3. *Cryptococcus Rogerii* Sartory et Demanche, Bull. Soc. Mycol. Fr. 5924 XXIII (1907) p. 179. — Cellulis elongatis subovoideis, 8-10 \approx 2-3, ut *Saccharomyces* germinantibus, temp. opt. 30-35°C.

Hab. in pure ex peritonitide feminae ægrotæ, Parisiis. — Segregat invertinam, inducit fermentationem alcoholicam, scindit glycosium et maltosium; coagulat lac; præcipitat caseinam; inoculatus in leporem est pathogenus.

(*) Non paucæ ex præcedentibus speciebus adhuc non ascophoræ inventæ huc ducendæ essent. Cfr. quoque *Torulopsis* Berl.

4. *Cryptococcus Gilchristi* Vuill. in Guég., Champ. paras. pag. 108, 5925 fig. 7. — Cellulis rotundis v. subovoideis, 16 μ . diam., tunica 3 μ . cr. præditis, 1-vacuolatis, germinantibus.

Hab. in scrofulodermatite, pseudolupo etc. hominis in America boreali (GILCHRIST). — Notas biolog. et pathol. vide apud Guéguen l. c.

5. *Cryptococcus Plimmeri* Costantin apud Guéguen, Champ. paras. 5926 p. 112. — Cellulis subrotundis, 4-10 μ . diam., germinantibus liberis v. intracellularibus, solitariis v. 2-60 congregatis; tunica bi-stratosa, zona peripherica hyalina.

Hab. in carcinomatibus humanis in Germania (PLIMMER). — Quoad characteres biologicos et pathologicos cfr. Guéguen l. c.

6. *Cryptococcus hominis* Vuill. apud Guég., Champ. paras. p. 109, 5927 f. 10. — Cellulis subrotundis, subinde ovoideis, tunica spissa præditis, germinantibus et sæpe per 2 v. 3 aggregatis, contentu homogeneo 1-2 nucleos valde refringentes includente.

Hab. in periostite chronica tibiæ hominis in Germania (BUSSE). — Quoad characteres biolog. et pathol. cfr. Guéguen l. c.

7. *Cryptococcus salmoneus* Sartory, C. R. Soc. de Biol. (1906) et 5928 Bull. Soc. Myc. Fr. XXIII (1907) p. 28 (absque diagn.). — Coloniis in culturis varie roseis; cellulis sphæroideis, levibus, 6-8 μ . diam., sicut in *Saccharomycete* gemmantibus; evolutionis optimum temp. 22°-25°C; ascosporis nullis visis.

Hab. in succo gastrico hyperacido hominis ægrotis, Parisiis.

8. *Cryptococcus linguæ-pilosæ* (Lucet) Vuill. ap. Guéguen, Champ. 5929 paras. pag. 110, fig. 11. — Cellulis ovoideis 3-6 μ . long., tunica tenui, protoplasmate hyalino granulis refringentibus prædito.

Hab. in lingua pilosa nigra hominis in Gallia (LUCET). — Quoad charact. biol. et pathol. cfr. Guéguen l. c.

9. *Cryptococcus lithogenes* (Sanfelice) Vuill. ap. Guéguen, Champ. 5930 paras. p. 111, fig. 12. — Cellulis pro more subglobosis, forma et magnitudine ludibundis, tunica plus minus spissa, subinde capsulâ hyalinâ inclusis, modo guttulas refringentes foventibus, modo mas-sulas rotundo-angulosas calcareas includentibus.

Hab. in gangliis lymphaticis bovis carcinomate necati in Italia (SANFELICE). — Quoad charact. biolog. et patholog. cfr. Guéguen l. c.

10. *Cryptococcus granulomatogenes* (Sanfelice) Vuill. ap. Guéguen, 5931 Champ. paras. p. 111. — Cellulis subglobosis v. leviter ovoideis,

magnitudine variis, contentu modo homogeneo, modo vacuoloso, nucleo centrali refringente præditis, germinantibus.

Hab. in nodulis pulmonum Suis serofæ, cui noxius, in Italia (SANFELICE). — Quoad char. biol. et pathol. cfr. Guéguen l. c.

11. **Cryptococcus clava** Wedl in Sitzungsab. K. Akad. Wiss. Wien, 5982 XXIX (1858) pag. 91, cum icone. — Cellulis exilibus, elongatis, hyalinis, uno apice leviter clavulato-incrassatis, $30-40 \times 2-3$ (apice crassiore), ceterum vix 1 μ . cr., contentu homogeneo, valde refringente, sæpe guttulado sed nucleo distincto nullo præditis, apice crassiore gemmulas 1-2, quarum alteram sæpe tenuiorem exerentibus; cellulis sæpius in catenam connexis.

Hab. in stomacho Bovis in Austria.

12. **Cryptococcus Gotti-Brazzolæ** Guéguen, Champ. paras. pag. 113, 5983 fig. 13. — Cellulis magnitudine variis, sphaericis vel subovoideis, contentu granuloso, membrana distincte duplici capsulaque hyalina, homogenea v. stratosata obtectis.

Hab. in myxosarcomate fossarum nasalium vaccæ, in Italia (GOTTI et BRAZZOLA). — Notas biol. et pathol. vide apud Guéguen.

13. **Cryptococcus Tokishigei** Vuill. in Guég. Champ. paras. p. 108, 5984 fig. 8. — Cellulis ovoideis utrinque acuminatis, solitariis, raro apice germinantibus, $3,7-4 \times 2,4-3,6$, tunica 1 μ . cr., contentu granuloso, centro nucleato.

Hab. in farcimine seu morva equorum in Japonia (TOKISHIGE). — Notas biolog. et patholog. cfr. apud Guéguen l. c.

14. **Cryptococcus farciminosus** Rivolta et Micellone apud Guéguen, 5985 Champ. paras. p. 109, fig. 9: — Cellulis subrotundis v. ovoideis, interdum utrinque acuminatis, sæpe germinantibus, variæ magnitudinis, plerumque $3-4 \mu$, tunica modo tenui, modo spissa, contentu sæpius granuloso.

Hab. in farcimine (lymphangite) equi, muli et asini in Italia, Gallia, Africa (RIVOLTA). — Quoad notas biolog. et pathol. cfr. Guéguen l. c.

15. **Cryptococcus niger** Vuill. ap. Guéguen, Champ. paras. p. 112. 5986 — Cellulis globosis v. ovoideis, tunica sat spissa præditis, germinantibus et $2-3$ -connexis; plasmate centrali granum nucleiforme versiforme includente.

Hab. in myxomate pulmonari Caviæ ex inoculatione hepatis foeti tuberculotici in Italia (MAFFUCCI et SIRLEO). — Quoad notas biol. et pathol. cfr. Guéguen l. c.

16. *Cryptococcus parasitarius* (Trab.) Guéguen, Champ. paras. p. 115. 5937
— Cellulis subrotundis, 3-4 μ . diam., guttulis refringentibus refertis, germinantibus.

Hab. in *Acridio peregrino*, socio *Lachnidio* (Fusario) *Acridiorum* in Algeria (TRABUT).

17. *Cryptococcus Anobii* Guéguen, Champ. paras. p. 115, fig. 16. — 5938
Cellulis piriformibus v. clavatis, 4,5 \times 3, extremitate acutiore germinantibus, contentu protoplasmatico granulis refringentibus plurimis, circa vacuolum centrale dispositis referto.

Hab. in cellulis intestini larvarum *Anobii panicei* ubi normaliter vivit, in Germania (W. KARAWAIEW et ESCHERICH). — Notas biologicas cfr. in Guéguen l. c.

18. *Cryptococcus Kleinii* Er. Cohn ap. Guéguen, Champ. par. p. 114, 5939 fig. 15. — Cellulis globulosis, 2-6 μ . diam., contentu homogeneo minute granulato, tunica tenui capsulâ hyalina, diametri totalis quartam partem occupante obvoluta.

Hab. in culturis variis, sociis aliis organismis pathogenis, in Germania (KLEIN). — Quoad charact. biol. et pathol. cfr. Guéguen l. c.

19. *Cryptococcus Bainieri* Sartory, C. R. Soc. Biol. LVIII, 2 (1906) 5940 p. 216. — Cellulis ovoideis v. ellipsoideis, levibus, 6-11 \times 4, more solito gemmantibus; coloniis intense roseis; evolutionis temperatura optimum 24-25°C; ascis hucusque ignotis.

Hab. saprophyticus ad folia maculata subputrida *Urticæ* in Gallia (G. BAINIER). — In cultura liquida cellulæ superficiales longiores et crassiores fiunt.

PSEUDOSACCHAROMYCES Br. et Farn. in Atti Ist. botan. Pavia X (extr. 1906) pag. 31 (Etym. *pseudes* falsus et *Saccharomyces*). — Cellulæ saccharomycetiformes, gemmantes, ellipsoideæ, hyalinæ, deinde brunneæ, intus granulosa, in acervulos simplices v. ramosos congestæ. — Genus omnino spurium.

1. *Pseudosaccharomyces Citri* Br. et Farn., l. c. t. VIII, f. 1-2. — 5941
Characteres generis.

Hab. in fructibus *Citri Limonis* morbo s. d. *ruggine bianca* deturpatis, in Sicilia. — Cellulæ 11,5 \times 9.

MYCODERMA Pers., Myc. Eur. I, p. 96 (1822) ex p., Desm., in Ann. Sc. Nat. I sér. X (1827) p. 59, em. Will et Leberle. Cfr. Leberle, Beiträge zur Kenntn. der Gattung *Mycoderma*. Münch. 1909

(Etym. *myces* fungus et *derma* pellis). — A *Saccharomycete* rite dignoscitur quia ascos et sporidia non generat, fermentationem aceticam non alcoholicam inducit, pelliculas membranaceas superficiales generat, præterea quia constat e cellulis junioribus irregulariter globoso-cuboideis, subtruncatis, numquam exacte globosis v. acutis, demum longiuscule catenatis, breviter cylindraceis, senioribus vacuolis 1-3 et guttulis oleosis 1-3 præditis; cellulis giganteis præsentibus. (Vulgo *Fiori del vinò, della birra, Kahmhaut, Fleurs de vin* etc.). — Præter speciem in vino *Mycoderma vini* Desm. (= *Saccharomyces Mycoderma* Rees — Syll. VIII, p. 917, ex parte), sequentes species fuse describit cl. Leberle, quarum tantum nonnullas notas morphologicas hic afferimus.

1. *Mycoderma cerevisiæ* Desm., l. c. em. Hansen, Leberle l. c. p. 73. 5942
— Cellulis germinatis cylindraceis, 7-10 \approx 2-3, longiuscule dendroideo-catenulatis; cellulis giganteis variis; evolutionis lentæ temperatura optimum 20-25°C; gelatinam solanaceam et betaceam fluidificat.

Hab. in *cerevisia*. — Var. *C* Leberle, l. c. pag. 74: differt cellulis germinatis ex ovoideo cylindraceis, 6-10 \approx 2-4, evolutionis rapidæ temperatura optimum 20-25°C. — In *cerevisia*.

2. *Mycoderma validum* Will, Centralbl. f. Bakter. II Abt. XXVIII 5943 (1910) p. 30. c. ic, Leberle, l. c. pag. 73. — Cellulis germinatis cylindraceo-ovoideis, 6-8 \approx 2-4, junioribus saccharomycetoideis, senioribus dendroideo-catenulatis; cellulis giganteis valde evolutis; evolutionis vividæ temperatura optimum 20-25°C; gelatinam non fluidificat.

Hab. in *Cerevisia vitiata*. — Copiose assimilat glycosium, levulosium nec non acidum lacticum; oxydat alcohol ethylicum.

3. *Mycoderma gallicum* Will, Centralbl. f. Bakt. II Abt. XXVIII 5944 (1910) p. 30, c. ic., Leberle l. c. p. 74. — Cellulis germinatis ex ovoideo cylindraceis, 7-10 \approx 2-3, dein dendroideo-catenulatis; evolutionis vividæ temperatura optimum 20-25°C; coloniis giganteis peculiaribus; gelatinam solanaceam et betaceam fluidificat.

Hab. in *cerevisia vitiata*. — Assimilat glycosium et levulosium, cetera ut in *Mycodermate cerevisiæ*.

4. *Mycoderma decolorans* Will, Centralbl. f. Bakter. etc. II Abt. 5945 (1910) p. 30. — Cellulis plerumque 8-11 \approx 5 e cylindraceo subconoideis, medio constrictulis, ovoideis, apice subapplanatis v. subapiculatis; oxydat fortiter alcohol ethylicum.

Hab. in *cerevisia vitiata*.

5. *Mycoderma saprogenes*-Sake Takahashi, Bull. Coll. Agric. Imper. 5946 Univ. Tokyo VII (1907) p. 101.

Hab. in fermento vitiatō Sake in Japonia. — Gradui elato alcoholis resistit et illud fortiter oxydat cum formatione acidi carbonici et aquæ.

6. *Mycoderma Humuli* Lasché, Der Braumeister, Chicago (1891) p. 293 5947 et *Mycoderma rubrum* Lasché, l. c. quæ colore rubente et multiplicationis forma peculiari utuntur, teste Leberle, l. c. p. 20 non v. vix spectant ad genus *Mycoderma*.

CICADOMYCES Karel Sulc, Pseudovitellus etc. in Sitzb. Kgl. Böhm. Ges. Wiss. Prag (1910) pag. 11, extr. fig. VI-VII (Etym. *Cicada* et *myces*). — Cellulæ maxime versiformes, subglobosæ, ellipsoideæ, nunc uno apice truncatæ, nunc rectæ, nunc inæquilatæ, nunc curvatæ, variæ magnitudinis, in series tortuosas breves per connectiva filiformia junctæ, plasmate homogeno, granulis (nucleis?) 1-3 prædito faretæ.

1. *Cicadomyces Ptyeli-lineati* Kar. Sulc, l. c. — Charact. generis; cel- 5948 lulis 6-10 μ . long., granulis (nucleis?) 1-2 μ . diam., subrotundis vel angulosis.

Hab. in cellulis medullaribus larvæ *Ptyeli lineati* ex Homopteris in Bohemia. — Var. II Sulc., l. c. pag. 14, f. VIII. — A typo differt cellulis multo minoribus, circ. 3 μ . long. et connectivis brevissimis. — In iisdem larvis.

2. *Cicadomyces Aphalaræ-Calthæ* Karel Sulc, l. c. pag. 20, fig. XI, 5949 extr. — Cellulis plerumque rhombeis v. trigonis v. elliptico-rhombis, c. 10 μ . diam. connectivis filiformibus plus minus longis junctis, plasma granulosum et corpuscula perexigua numerosa foveantibus, etiam divisione cruciata, ut videtur, se multiplicantibus.

Hab. in cellulis medullaribus larvæ *Aphalaræ Calthæ* ex Homopteris in Bohemia.

3. *Cicadomyces Liberiæ* Buchner, Stud. intrac. Lymb. in Arch. Pro- 5950 tist. Jena (1912) pag. 101, t. 9. — Affinis *Saccharomyceti Cicadarum*; cellulis ovoideis, globulosis v. polymorphis, conglomeratis, 3-8 μ . long.

Hab. in *Cicadæ* spec. partibus periphericis mycetomatis in Liberia Africæ.

4. *Cicadomyces minimus* Buchn., l. c. p. 102, t. 9. — Cellulis mini- 5951 mis, 1,5-3 μ . diam.

Hab. cum priore in Liberia.

5. *Cicadomyces rubri-cinctus* Buchn., l. c. p. 103, t. 11. — *Cicado-* 5952
myceti Aphrophoræ-Salicis similis; cellulis versiformibus plasmate
 denso farctis, in mycetomate epithelio rubente cincto nidulantibus.
Hab. in *Aphrophora Salicis* in Germania.
6. *Cicadomyces Aphrophoræ-Salicis* K. Sulc 1910, ap. Buchner l. c. 5953
 pag. 102, t. 11. — In interiore mycetomatis nidulans; cellulis in
 larvis maturis crassioribus et brevioribus, in insectis perfectis glo-
 bosis v. ovoideis, divisione transversa se multiplicantibus, plasmate
 demum vacuolato.
Hab. in mycetomate *Aphrophoræ Salicis* in Bohemia et
 Germania. — Adest alia generis species *Cicad. Aphrophoræ-Alni* K.
 Sulc vocata, sed nec ab hoc auctore neque a Buchner l. c. p. 103
 descripta.
7. *Cicadomyces minor* Buchner, l. c. p. 103. — Cellulis 3 μ . diam., 5954
 germinando cuneatis, vacuolatis.
Hab. in mycetomate, inter granula flavo-ochracea, *Ptyeli li-*
neati in Germania.
8. *Cicadomyces dubius* Buchner, l. c. p. 104, t. 5, f. 8. — Cellulis 5955
 densissime glomeratis, minutis.
Hab. in parte centrali mycetomatis *Psillideæ* cujusdam in
 Fraxino, in Germania.

SCHIZOSACCHAROMYCES Lindner (non Beijerinck) — Syll. XI p. 458,
 XIV p. 828, XVIII p. 201.

1. *Schizosaccharomyces Aphidis* K. Sulc, *Pseudovitellus* etc. in Sitzung. 5956
 K. Böhm. Gesellsch. Prag. (1910) p. 22, fig. XIV extr. — Cel-
 lulis subglobosis v. ellipsoideis 4 μ . diam., copulatione in series
 breves conjunctis, plasma granulosum cum vacuolis et 1-2 nucleis
 continentibus, gemmipare vel divisione transversali se multipli-
 cantibus.
Hab. in corpore *Aphidis* ?amenticolæ aliorumque *Aphi-*
dum in Bohemia.
2. *Schizosaccharomyces Aphalaræ-Calthæ* Karel Sulc, l. c. p. 30, f. XII. 5957
 — Cellulis perfecte globosis, 4 μ . diam., subinde uno polo minute
 apiculatis, solitariis dein copulatione 2-3 plerumque in formam te-
 tradis conjunctis, demumque per divisionem radiatam se multipli-
 cantibus.
Hab. in cellulis medullaribus larvæ *Aphalaræ Calthæ* in
 Bohemia.

3. **Schizosaccharomyces Psyllæ-Försteri** K. Sulc., p. 21, fig. XIII. — 5958
Cellulis regulariter ellipsoideis, mox copulatione 2-4 conjunctis, demum per divisionem se multiplicantibus.

Hab. in cellulis larvæ *Psyllæ Försteri* in Bohemia.

4. **Schizosaccharomyces Chermetis-strobilobii** K. Sulc., l. c. p. 22, f. XV, 5959
extr. — Cellulis subsolitariis, exiguis, fusoides, rectis curvulisve utrinque obtuse acutatis, vix 1-2 μ . long. plasma granulosum cum vacuolis et nucleum singulum continentibus, gemmiparè v. divisione transversali se multiplicantibus.

Hab. in corpore *Chermetis (Gnaphalodes) strobilobii* in Bohemia.

5. **Schizosaccharomyces Chermetis-Abietis** K. Sulc., l. c. p. 23, extr. — 5960
Cellulis exiguis, 1-2 μ . long., cylindræis et utrinque rotundatis, 1-nucleatis, divisione transversali tantum se multiplicantibus.

Hab. in corpore *Chermetis Abietis* in Bohemia. — *Schizosaccharomyceti Pombe* affinis dicitur.

6. **Schizosaccharomyces Drepanosiphi** Buchner, Stud. intrac. Symb. 5961
in Arch. Prot. Jena (1912) p. 98, t. 1. — Cellulis globulosis exiguis sed variæ magnitud., 2-4 μ . diam. (in ovis), solitarie v. schizogenetice binis-ternis, plasmate granuloso.

Hab. in Aphidibus (*Drepanosiphis*) in Germania.

7. **Schizosaccharomyces Sulcii** Buchn., l. c. p. 100, t. 8, *Cicadomyces* 5962
Sulcii Buchn. olim.

Hab. in cellulis adiposis *Cicadæ* sp. in Japonia. — Cellulæ globosæ, circ. 3 μ . diam. in ovis, dein schizogenetice constricto-didymæ, varie guttulato-nucleatæ.

SCHWANNIOMYCES Klöcker, C. R. Trav. Labor. Carlsberg VII vol. 4 livr. (1909) p. 271, fig. 4-6 (Etym. a celebri THEOD. SCHWANN). — Sporidia seu endospore membrana simplici, extus sparse et minutissime verruculosa et lineola anuliformi æquatoriali percursâ prædita.

1. **Schwanniomyces occidentalis** Klöcker, l. c. pag. 275, fig. 4-6. — 5963
Cellulis plerumque ellipsoideis vel sphæroideis 5-10 μ . cr., raro suballantoideis, temperatura gemmationis 3,5°-38°C; endosporis subellipsoideis 3-4,5 μ . long. uniguttulatis, singulis in quaque cellula rarissime duabus, minutissime verruculosis et æquatorialiter lineolatis.

Hab. ad terram ex ins. St. Thomas Antillarum danicarum. — Fermentationem alcoholicam inducit.

Syll. fung. XXII (II-1913)

DEBARYOMYCES Klöcker, C. R. Trav. Labor. Carlsberg VII v., 4 livr. (1909) p. 271, fig. 1-3 (Ety. ab illustri ANT. DE BARY). — Endosporæ seu sporidia membrana simplici, extus sparse et minute verruculosâ prædita.

1. *Debaryomyces globosus* Klöcker, l. c. p. 273, fig. 1-3. — Cellulis 5964 constanter globosis v. subglobosis 4,5-5 μ . diam.; endosporis globulosis in quaque cellula (asco) una rarissime duabus, 2-3,5 μ . d., uniguttulatis, temperatura sporificationis 14°-36°C, gemmationis cellularum 5°-43°C.

Hab. ad terram ex ins. St. Thomas Antillarum danicarum. — In cerevisia fermentationem alcoholicam inducit.

NADSONIA Syd. Ann. Mycol. X (1912) p. 348, *Guilliermondia* Nadson et Konokotine in Bull. du Jard. imp. de Botanique de St. Petersburg, XI (1911) p. 142 c. fig., non Boudier (1904). (Ety. a cl. Prof. G. A. NADSON petropolitano). — Cellulæ ovoideæ, ellipsoideæ vel citrifformes, amyelicæ. Asci e copulatione heterogamica duarum cellularum per apiculos conjugatarum oriundi, globosi, monospori, rarius breviter ellipsoidei bispori. Sporidia perfecte sphaerica episporio minutissime asperulo, flavo-brunneolo prædita et guttula oleosa, crassa, globosâ fœta. — Generi *Debaryomyceti* affinis sed sporogenesis diversa.

1. *Nadsonia fulvescens* (N. et K.) Syd, l. c., *Guill. fulvescens* Nadson 5965 et Kon. l. c. p. 143, fig. 1-40. — Coloniis diu albis, denique ascligeris et tunc e rubescenti flavido-brunneolis; cellulis 6-8 \times 4, initio minute granulosi, hyalini, post sporogenesim vacui; ascis 7-8 μ . diam., rarius 8-9 \times 6-7; sporidiis in asco monosporo 6 μ . diam., in ascis bisporis 4 μ . diam.

Hab. in fluxu mucoso canis, Petropoli Rossia. — Cellulæ vegetativæ gemmipare multiplicantur.

WILLIA E. Chr. Hansen — Syll. XVIII, pag. 198 — (Ety. a cl. prof. H. WILL, monacensi). — Huc quoque ducenda: *Willia Saturnus* (A. Kl.) E. Chr. Hans. — Syll. XVIII, pag. 198 et 200 (*Saccharomyces*).

1. *Willia Wichmanni* Zikes, Centralbl. f. Bakter. II Abt. XVI (1906) 5966 p. 97. — Cellulis 3-5 \times 3, in membrana (griseo-alba) usque ad 6-40 μ . long.; ascis 2-4-sporis; sporidiis pileiformibus costulatis, 2 μ . diam. (dempta costula); optimum evolutionis 22°C; ætherem acetum efformat, adsimilat dextrosium et levulosium sed lente.

Hab. culta in substantiis variis ex terra provenientibus.

2. *Willia anomala* E. C. Hans. — Syll. XVIII, p. 198 et XI p. 457 — 5967
var. *belgica* Lindn., Mikrosk. Betriebskontr. 3. Aufl. (1898) p. 382
(Saccharom.), *Will. belgica* (Lindn.) Zikes, Centralbl. f. Bakt. etc.
II Abt. XVI (1906) p. 98. — Cellulis minutis, variis, vacuis, tenuiter tunicatis; endosporis pileiformibus, distincte acute costulatis.

Hab. in cerevisia belgica. — In musto pelliculam punctatam format; ætherem æthylicum non generat.

PICHIA E. Chr. Hans. — Syll. XVIII, p. 198 (Etym. a cl. prof. P. PICHÉ, Scholæ œnologicæ Coneliani). — Huc quoque ducenda *Pichia membranifaciens* C. H. Hans. — Syll. I. c. et VIII, p. 918.

1. *Pichia farinosa* Lindn. Mikrosk. Betriebskontr. IV ed. p. 426, Guill. 5968
lierm. in Ann. mycol. (1910) p. 296, fig. 10. — Cellulis cylindraceo-fusoides, breviter catenulatis, utrinque obtusulis, per processus laterales binas cellulas conjungentes se copulantibus, denique nucleos quaternos (sporidia) 1-seriatis, globosos foventibus.

Hab. in fermentis *Sojæ* aliisque.

ZYGOSACCHAROMYCES Barker — Syll. XVI p. 818, XVIII p. 198.

1. *Zygosaccharomyces japonicus* Saito, Bot. Magaz. XXIII, pag. 96 5969
(1909), Guilliermond in Ann. Mycol. VIII (1910) p. 293, f. 7. — Cellulis globosis v. globoso-piriformibus, in appendiculam cylindraceam plerumque productis et binis per eam se zygotice conjungentibus, sparsis v. glomeratis, intus 1-4 nucleos (sporidia) generantibus.

Hab. in fermento *Sojæ* in Japonia. — Ex cellularum conjugatione ad hoc genus spectat, sed ceteræ notæ ulterius inquirendæ.

2. *Zygosaccharomyces Priorianus* Klöcker, Die Gärungsorgan. in Theorie und Praxis der Alkoholgärungsgewerbe, 2 Aufl. Stuttgart, (1906), Guill. in Ann. Mycol. VIII (1910) pag. 294, f. 8-9 — A *Zygosaccharomycete japonico* differt (ex icone cit. Guill.) imprimis cellulis numquam in appendiculam cylindraceam productis, ibidem denique nucleos (sporidia) 2-4 globosos includentibus.

Hab. in fermentatione alcoholica.

3. *Zygosaccharomyces lactis* W. Dombrowski, Centralbl. f. Bakt. etc. 5971
II Abt., 28 Bd. (1910) p. 371, cum icon. — Cellulis sphæroideis plerumque 4-5 μ . diam.

Hab. in lacte fermentescente.

Genera et species dubia v. inquirenda.

Cfr. Leberle, l. c. pag. 20-21, Sulc, l. c. et Buchner, l. c.

- Endoblastoderma amycoides** Fischer u. Brebek, Zur Morphologie, Biologie u. Systematik d. Kahmpilze, d. *Monilia candida* Hans. und d. Soorerregers, Jena G. Fischer (1894), 52 pp. cum 4 tab. 5972
- Endoblastoderma pulverulentum** (Beijer.) Fisch. u. Brebek, l. c. 5973
- Blastoderma salmonicolor** Fischer u. Brebek l. c. 5974
- Glukomyces** Beijerinck, Centralbl. f. Bakter. etc. I Abt. Bd. XI (1892) p. 68. 5975

- Kermincola kermesina** K. Sulc. in S. B. böhm. Ges. Wiss. Prag (1906), Buchner, Stud. intracell. Symbionten in Arch. Protistenk. Jena (1912) p. 94, f. 19. 5976

Hab. in *Kermete Quercus* ex Coccidiis, in Bohemia. — Cellulæ cylindraceæ, apice subacutæ, 1-3-nucleatæ, $20 \approx 4$; mycelium nullum.

- Kermincola physokerminea** K. Sulc., l. c. Buchner, l. c. f. 20. 5977
- Hab.* in *Physokermete Abietis* ex Coccidiis, in Bohemia. — Cellulæ lacrymiformes uno polo v. utrisque acutæ, $10 \approx 3$; mycelium nullum.

- Psyllidiomyces tenuis** Buchner, l. c. p. 97, t. V, f. 4-7. 5978

Hab. in cellulis adiposis et lymphæ *Psyllidis* cujusdam in Salice. — Cellulæ cylindraceæ plasmate granuloso farctæ, utrinque obtusulæ, longitudine varia, sed non indicata. Mycelium nullum.

- Lecaniascus polymorphus** Moniez, in Bull. Soc. zool. Fr. XII (1887), Buchner, l. c. p. 97. 5979

Hab. in *Lecanio Hesperidum* in Gallia. — Cellulæ ovato-oblongæ, 4-5 μ . longæ. Mycelium 50-60 μ . long., hinc inde contractum. Asci (?) rariores, 40 μ . long., sporidiis ovoideo-oblongis referti.

- Aleurodomyces Signoretii** Buchner, l. c. p. 100, t. 4. 5980

Hab. in mycetocystis *Aleurodis* sp. in Germania. — Cellulæ globosæ v. ovoideæ sæpe deformatæ, 2-5 μ . long., plasmate granuloso et vacuolato.

- Coccidomyces Pierantonii** Buchn., l. c. p. 102. 5981

Hab. in mycetomate *Iceryæ Purchasi* ex Coccidiis. — Cellulæ (in culturis) 5 μ . diam., vacuolum unicum continentes.

- Coccidomyces Dactylopii** Buchner, l. c. p. 105. 5982

Hab. in mycetomate *Dactylopii Citri* in Germania. — Efformat vesiculas cystiformes in quibus cellulæ falseiformes numerosissimæ, membrana magis diaphana cinctæ, nidulantur.

Fam. 18. Protomycetaceæ DE BARY

PROTOMYCES Ung. — Syll. VII p. 319, IX p. 363, XI p. 251, XIV p. 829, XVIII p. 202.

1. **Protomyces Crepidis** (Jaap.) Sacc. et Trott., *Protomycopsis Crepidis* 5933
dis Jaap, Ann. Mycol. VI (1908) p. 204. — Pustulis parvis 0,5-0,75 mm., sæpe punctiformibus, rotundatis, numerosis, sordide griseo-flavis, demum flavo-brunneis, in pagina inferiore hemisphærico-prominentibus; sporis irregulariter globosis, 25-36 μ . cr., hyalinis v. pallide flavis; episporio 2-5 μ . cr., verrucis hyalinis crebris sæpe lineariter elongatis tecto, contentu hyalino, granuloso.

Hab. in foliis vivis *Crepidis incarnatæ* prope St. Ulrich et Penegal Mendelgebirge Austriae. — A *Pr. Leucanthemi* (Syd.) Magn. sporis multo minoribus omnino diversum.

2. **Protomyces gravidus** Davis, Journ. of Mycol. XIII (1907) p. 188. 5984
— Sporis subepidermicis vel in zona vasculari ortis, numerosis, plerumque globosis vel etiam ellipsoideis, ovoideis vel polygoniis, 30-55 \times 27-40, plurinucleatis, superficie plus v. minus inæquali, episporio 1-3 μ . cr. brunneo; endosporis maturis 3-5 μ . crassis, hyalinis.

Hab. in ramis, petiolis et nervis plus minusve hypertrophicis *Bidentis cernuæ*, *B. connatæ*, *B. frondosæ* in America boreali.

3. **Protomyces ? Gaillardiae** Speg., An. Mus. Nac. Buenos Aires t. XIX 5985 (1909) pag. 284. — Maculis obsoletis orbicularibus indeterminatis, amphigenis vix incrassatulo-prominulis, opacis, 2-5 mm. diam., fusciculis, sæpe areola pallescenti cinctis; sporis solitariis in quaque matricis cellula, globosis, 30-35 μ . diam., crassiuscule tunicatis, levibus, pellucidis, pallide rufescentibus, eguttulatis.

Hab. in foliis vivis *Gaillardiae Donianæ* in pratis circa Metàn, Salta Amer. austr. — An oogonia *Peronosporæ* v. *Cystopodis* ejusdæm?

4. **Protomyces (?) persicifilus** Speg., Rev. Ministerio Agric. Buenos Aires II (1908) n. 2, pag. 39, Nota, cum icon. — Maculis effusis tumidulis, subtorulosis, flavescenti-aurantiacis; sporis in cellulis subepidermicis hypertrophicis parum deformatis, solitariis, globosis, 20-25 μ . diam., crassissime tunicatis, levibus, grosse 1-nucleatis, endoplasmate nubiloso.

Hab. in ramulis Persicæ vulgaris quos hypertrophicos reddit, prope La Plata Rep. Argentina. — Forsan inter Chytridias locandus.

5. *Protomyces radiculicola* Zopf, Pilze in Schenk, Handb. IV, p. 280, 5987 f. 4, Wildeman Mém. Soc. Belg. Microscop. XVII (1893) p. 28, t. 2, f. 26-29 et t. 3, f. 26-30. — *Mycelio tenui*, filiformi, parce ramoso, 4-7 μ . cr., septato, ex exteriori radicis oriundo et inter cellulas matricis penetrante, ibique ramoso; ramis anastomosantibus et appendiculas (haustoria) exerentibus, hinc inde acrogene v. intercalariter se globoso-inflantibus et sporas generantibus; sporis globulosis (sporangiiis?) 28 μ . diam. v. (præcipue intercalaribus) ovato-ellipsoideis, tunica crassa, flava, contentu plus minus refringente.

Hab. in radicibus Stifitiæ chrysanthæ cultæ in Germania et Limosellæ aquaticæ in Belgio. — Germinatio sporarum nondum observata.

VOLKARTIA R. Maire, Bull. Soc. bot. de Fr. t. LV (1908) p. CXLV (Etym. a Doct. A. VOLKART botanico helvetico). — Sporangia subepidermica, membranâ incrassata, duplici prædita; sporangii maturi membrana externa disrupta, interna sporis repleta protrudente et sacculum ascoideum efformante; sacculis ascoideis hymenium exoascoideum efformantibus.

1. *Volkartia rhætica* (Volk.) R. Maire l. c. pag. CXLVII, *Taphrina* 5988 *rhætica* Volk. — Syll. XVIII, p. 197. — Hypophylla v. amphigena, in foliis plagas bullatas, flavovirentes vel subcarneas efformans; sporangiiis subepidermicis, globosis v. subglobosis, 10-25 μ . diam.; sacculis ascoideis ovoideis, oblongis v. cylindraceis, 60-120 \times 15-25; sporis primitus sphaeroideis, dein oblongis vel oblongo-linearibus, rectis v. curvulis, utrinque rotundatis, continuis, hyalinis, 1-2-guttulatis, 4-7 \approx 1-2; mycelio intercellulari.

Hab. in foliis Crepidis pygmææ, blattarioidis, succisæfoliæ in Pyreneis Galliæ et montibus Helvetiæ.

TAPHRIDIDIUM Lag. et Juel. — Syll. XVIII p. 202.

1. *Taphrididium Cicutæ* Lindroth, Mykol. Mitteil. 11-15, in Acta Soc. 5989 pro Fauna et Fl. fenn. XXVI (1904), p. 9, c. ic. — *Mycelio* hyalino, intercellulari, in mesophyllo late effuso et pustulas rotundatas plus minusve rubidas 1 mm. v. plura longas efformante; cellulis mesophylli hypertrophicis et tunc 45-135 \approx 70-90, rotundato-

ellipsoideis; sporis numerosis, massa sporarum pallidissime flavo-virenti; sporis singulis hyalinis, elongatis, 4-7 v 1,2-1,8.

Hab. in foliis vivis Cicutæ virosæ, Rossia bor. et Fennia.

2. *Taphridium Umbelliferarum* (Rostr.) v. Lagerh. et Juel — f. He- 5990
raclei Jaap, Verh. Bot. Ver. Prov. Brand. L (1908) p. 30 (nomen nudum).

Hab. in Heracleo Sphondyllo prope Putels Grödner Tal Tiroliae merid.

MONASCUS Van Tiegh. — Syll. IX p. 373, XIV p. 825.

1. *Monascus Barkeri* Dang., Le Botaniste X (1907) p. 178, t. 32-38, 5991
Kuyper in Ann. Mycol. III (1905) p. 43, tab. II, f. 13-27 (expositio tantum cyto-biologica).

Hab. ex culturis in Asia orient. peractis ad præparationem fermenti cujusdam *Samsu* dicti pro spiritu vini. Cultus quoque in Britannia et Gallia. — Sporangia (?) subglobosa, tunica subanhista; ascus octosporus; sporidia ovoidea rubenti-brunnea, 4-8 μ . long. — Cfr. Barker in Ann. of Bot. XVI (1903) p. 167, tab. XII-XIII.

2. *Monascus olei* Piedallu, in C. R. Acad. Sc. Paris (Aug. 1910) 5992
p. 397, *Mon. purpureus* Piedallu, ibid. (févr. 1909), non de Went. — Peraffinis *Mon. purpureo* de Went et *M. Barkeri*, a quibus differt præcipue characteribus biologicis: evolutionis optimum temp. 30°-40°; germinatio usque ad 46°, nulla ad 47°; coloniis effusis ex albo roseolis v. subviolaceis, in substrato lacteo mox rubris.

Hab. in fundo dolii oleo, vulgo dicto japonico, referti et in coriis oleo perfectis in Gallia.

MYXOMYCETÆ (*)

Syll. VII p. 323, X p. 83, XI p. 462, XIV p. 831, XVI p. 819, XVIII p. 208.

Fam. 1. Myxomycetaceæ WALLER.

BADHAMIA Berk. — Syll. VII p. 329, X p. 83, XVI p. 819, XVIII p. 208.

1. *Badhamia foliicola* List., Journ. of Bot. XXXV (1897) p. 209, Torrend Myxom. p. 210, t. 6, f. 11. — Plasmodio flavo-aurantiaco; peridiis subglobosis, subinde piriformibus, agglomeratis vel laxe gregariis, 0,5-1 mm. diam., griseo-cyaneis, sessilibus v. stipite tenui, 0,2-0,5 mm. longo præditis, brunneo-aurantiis, tunica calce experte; capillitio albo, parciissime calcifero; sporis liberis v. interdum 3-6-glomerulatis, violaceo-brunneis, 11 μ . diam., tenuiter echinulatis.

Hab. in foliis emortuis, fragmentis variis etc. in Britannia, Germania, Lusitania.

2. *Badhamia orbiculata* Rex, Proc. Philad. Acad. (1893) pag. 372, Macbride Slime Moulds p. 66, t. 14, f. 4, Torr. Myxom. p. 208,

(*) De hac singulari familia post sapientem ejus fundatorem J. ROSTAFINSKI, eheu a septem lustris silentem, bene et ex professo tractaverunt ARTH. LISTER, THOM. H. MACBRIDE, CAM. TORREND alique; nunc vero (1911) opus apparuit ceteris splendidius, nempe *A Monograph of the Mycetozoa*, II ed., ab ipso ARTH. LISTER b. m. concinnatam, adjuvante vero et edente ejus filia GULIELMA, tabulis CCI pulcherrimis, plerisque coloratis, ornatam et absolutissimam. Omnibus qui in perdifficili familiae studium incumbere velint opus Listerianum tutissime commendamus.

Pars *Sylloges*, ad Myxomycetes spectans et jam senescens, fere tota nunc reficienda esset, sed optimis monographiis jam nunc, ut dixi, uti possumus. Hic tantum damus non modo diagnoses specierum novarum sed, et non paucas, specierum in voluminibus præcedentibus fortuito omissarum.

t. VI, f. 12. — Plasmodio?; peridiis orbiculari-discoideis v. irregulariter elongatis et plasmodiocarpicis, 1 mm. circ. latis, sæpe breviter stipitatis et tunc supra subumbilicatis; tunica grisea, sæpe granulis calcareis farcta, deorsum brunnea; stipite nullo v. brevissimo, nigro, ruguloso; capillitio albo; sporis nigro-violaceis, tenuiter verrucosis, 12-15 μ . diam.

Hab. ad ligna emortua in America boreali.

3. *Badhamia rubiginosa* (Chev.) Rost. — Syll. VII, p. 334 — var. 5995 *globosa* List. ap. Torrend Myxom. p. 212. — Peridiis subglobosis, leniter depressis, 0,7 mm. diam., e griseo purpurascens; capillitio interdum parce calcifero; stipite atro-brunneo, 0,5-1 mm. long.; columella atro-brunnea, claviformi; sporis valide verrucosis v. reticulatis.

Hab. ad Muscos in Britannia et Hibernia.

PHYSARUM Pers. — Syll. VII p. 336, X 84, XI p. 462, XIV p. 831, XVI p. 819, XVIII p. 209.

1. *Physarum variabile* Rex, Proc. Philad. Acad. (1893) p. 371, Torr. 5996 Myx. p. 188. — Plasmodio?; peridiis totis 1 mm. alt., sparsis v. aggregatis, ovoideis v. piriformibus, interdum plasmodiocarpis sessilibus v. stipitatis, 0,4-0,5 mm. lat., rugosis, nitidulis, flavo-olivaceis, ochraceo-brunneis; tunica membranacea crusta calcarea flavicante et caduca secedente, irregulariter dehiscente; stipite longitudine et colore vario, 0,3-0,4 mm. longo, albo v. flavido, subinde atro-brunneo, sæpius olivaceo, granulis calcareis albis referto, capillitio e filamentis reticulatis, hyalinis, axillis dilatatis, nodulos calcareos albos v. flavidos conjungentibus; columella nulla v. subnulla; sporis minute verrucosis, atro-violaceis, 9-10 μ . diam. — var. *sessile* List., Journ. of Bot. (1898) tab. 385, fig. 2: peridiis omnino sessilibus.

Hab. cum var. ad ligna emortua in America boreali et australi et in Suecia.

2. *Physarum murinum* Lister, Mycetoza p. 41, t. VII, f. B, ed. II, 5997 p. 50, t. 18, Torr. Myxom. p. 185. — Plasmodio?; peridiis globosis v. subglobosis, brunneo-griseolis v. murinis, sparsis v. gregariis, rugulosis; stipite 0,5 mm. alt. v. amplius, pallide brunneo, recto, subinde subfusoides, fragili, granulis calcareis farcto; columella brevi, hemisphærica v. obtuse conica; capillitii diu persistentis floccis hyalinis, nodulos calcareos copiosos pallide brunneos v.

flavos connectentibus; gleba brunnea; sporis brunneo-violaceis v. lilacinis, sublevibus, 6,5-10 μ . diam.

Hab. ad ligna emortua in Britannia, Suecia, Helvetia, Amer. bor. — Var. *Ravenelii* (Morg.) Torr. l. c. *Cytidium Ravenelii* Morg. Myx. Miami Valley, p. 82. — Nodulis calcareis flavis; stipite fusoides; sporis 6,5-7,5. — Ad ligna in Amer. bor.

3. *Physarum compactum* (Wing.) List. Mycetozoa p. 44, t. 10, f. B, 5998 Torrend Myxom. p. 191, t. VI, f. 8, *Tilmadoche compacta* Wing. Proc. Philad. Acad. (1889) p. 48, *Lepidoderma stellatum* Masee, Myxog. p. 252. — Plasmodio?; peridiis totis 1-2 mm. altis, gregariis, globulosis v. infra appianatis, 0,5 mm. diam., rectis v. nuntantibus, albis v. griseo-brunneolis albo-maculatis, tunica membranacea, glomerulis calcareis innatis numerosis onusta, maturitate in 6-12 segmenta petaloidea dehiscente; stipite albo v. albo-flavido, subinde basi nigricante, 0,5-1,5 mm. alt., sursum tenuato, superne granulis calcareis farcto, columella e grumo granulorum calcareorum, supra apicem stipitis sito constante; floccis e grumo radiantibus, incoloribus, copiosis, parce calcareo-nodulosis, nodulis minutis fusoides; gleba brunnea; sporis brunneo-violaceis, minute verrucosis, 7-8 μ . diam.

Hab. ad ligna putrida in Amer. bor. et centrali et Borneo.

4. *Physarum Betheli* Macbr. ap. Lister, Mycetoz. II ed. p. 57, t. 200. 5999 (1911). — Plasmodio; peridiis stipitatis, subglobosis, infra umbilicatis erectis v. inclinatiss, 0,5-0,7 mm. diam., pallide sulphureis v. (ubi calce expertibus) iridescenti-violaceis; tunica membranacea granulis calcareis sulphureis plus v. minus copiosis farcta; stipite firmo atro-brunneo v. nigro, 0,1-0,5 mm. alto; columella nulla; capillitii floccis hyalinis, dense reticulatis, nodulis calcareis subinde ramosis pallide sulphureis inspersis; sporis violaceo-brunneis, minute verrucosis, 9-10 μ . diam.

Hab. ad ligna putrescentia, Colorado Amer. bor. — Affine *Physaro viridi* var. *incano*.

5. *Physarum psittacinum* Ditm. — Syll. VII, p. 341 — var. *fulvum* 6000 List., Journ. of Bot. XLIV (1906) p. 228, Torr. Myx. p. 195. — A typo dignoscitur tantum stipite basique peridii fulvis, nec æqualiter aurantio-rubris.

Hab. ad truncos vetustos in Japonia.

6. *Physarum galbeum* Wingate in Ell. et Ev. N. Am. Fgi. n. 2491, 6001 Macbride Amer. Slime-Moulds p. 53, Torrend Myxom. p. 194. — Ab affini *Physaro flavicomo* distinguitur peridiis aureo-flavis, gra-

nulis calcareis conspicuis inspersis; stipite pallide brunneo v. succineo, opaco nec non floccorum nodis minoribus; sporis sublevibus, lilacinis v. violaceis, 7,5-10 μ . diam.

Hab. ad ligna emortua in America boreali.

7. *Physarum penetrale* Rex, in Proc. Philad. Acad. (1891) p. 389, 6002 List. Mycetoz. p. 49, t. XIV A, Torr. Myxom. p. 201, t. IX, f. 11. — Plasmodio?; peridiis sparsis v. gregariis, rectis, ellipsoideis v. piriformibus, 0,5-0,7 mm. alt., 0,3-0,5 mm. lat., raro globulosis, griseis v. pallide flavo-viridulis; tunica membranacea, semidiaphana, granulis calceis pallide flavis v. griseolis inspersa, usque ad basim in segmenta 2-4 fatiscente; stipite variabili, tenui, subulato diaphano, atro-rubro v. rubro-aurato, in columellam flavo-rubentem, acuminatam, $\frac{4}{5}$ peridii attingentem producto; capillitio copioso persistente, nodulis subrotundis flavis sæpius calcareis insperso; gleba brunnea; sporis sublevibus, violaceo-brunneolis, 5-7 μ . diam.

Hab. ad ligna emortua, Muscos, Pinorum folia etc. in America bor., Britannia, Germania, Lusitania.

8. *Physarum citrinellum* Peck, Rep. St. Mus. New Y. XXII (1879) 6003 p. 89, *Craterium citrinellum* (Peck) Lister, Mycetozoa p. 74, t. 28, f. B, *Physarum cæspitosum* Schw. Syn. N. Am. Fungi pag. 258 (verisimiliter) — Syll. VII, p. 350 — Torr. Myxom. p. 192. — Plasmodio?; peridiis totis 1-1,5 mm. alt., subglobosis, gregariis v. sparsis, flavo-citrinis v. ochraceis, basi aurantio-tinctis; tunica duplici, exteriore cartilaginea, flava ex granulis calcareis copiosis rugulosa, ab interiore facile secedente; stipite cylindrico, 0,3-0,4 mm. long. valido, plicato, rubro-aurantio v. fuligineo, diaphano; capillitii floccis hyalinis, ramosis, nodulis latis calcareis albis præditis, gleba nigra; sporis brunneo-purpureis fortiter echinulatis, 10-12 μ . diam.

Hab. ad ligna emortua et ad Muscos in Amer. bor. et in Japonia.

9. *Physarum carneum* G. Lister, Journ. of Bot. 48 (1910) p. 73. — 6004 Peridiis sparsis, stipitatis, subglobosis, 0,4-0,6 mm. diam., ochraceis, levibus v. rugulosis; pariete membranaceo, pallide flavo, cumulis calcareis granuliformibus, ad basim crassioribus consperso; stipite rubro-carneo, diaphano, striato, calce carente, 0,2-0,3 mm. alto; columella minuta, conica aut nulla; capillitio dense reticulato-floccoso, floccis anguloso-ramosis hyalinis, calcareo-nodosus, ramis brevibus hyalinis connectentibus; sporis globosis, purpureo-brunneis, spinulosis, 8 μ . diam.

Hab. ad ligna putrida, Colorado Springs Amer. bor. (STURGIS).

10. *Physarum nucleatum* Rex, Proc. Philad. Acad. (1891) pag. 389, 6005
 Lister, Mycetoz. p. 49, Torr. Myxom. p. 191. — Plasmodio?; peridiis totis 1-2 mm. alt., sparsis v. gregariis, globulosis, rectis v. nutantibus, 0,5 mm. latis, albis; tunica membranacea, irregulariter dehiscente, glomerulis calcareis innatis v. inspersis prædita; stipite subulato, albo-flavido, rugoso, 1 mm. alto; columella nulla; capillitio niveo-albo, circa nucleum calcareum nitidum ad stipitis summitatem situm disposito, nodulisque minutis, albis, subrotundis prædito; gleba nigra; sporis brunneo-violaceis, minute echinulatis, 6-7 μ . diam.

Hab. ad ligna emortua in America boreali, Antillis, Japonia.

11. *Physarum nutans* Pers. — Syll. VII, pag. 359 (*Tilmadoche*) — 6006
 var. β *violascens* Rost., Monogr. p. 114. — Peridio cyanescente v. violaceo, fragili, nutante, crusta calcarea superficiali nulla; stipite longiusculo; sporis 8-9 μ . diam. — var. γ *robustum* Lister, Mycetoz. p. 51. — Peridio granulis calcareis referto, persistente; stipite valido, recto, brevi v. nullo; capillitii nodis latioribus, 20-50 μ . diam., interdum in centrum peridii confluentibus; plasmodiocarpis non raris; sporis evidentius verrucosis, 9-11 μ . diam.

Hab. ad caudices et ligna emortua, β in Germania et Lusitania, γ fere ubique.

12. *Physarum crateriforme* Petch, Ann. R. Bot. Gard. Peradeniya 6007
 IV, Pt. V (1909) pag. 304. — Peridiis stipitatis, plasmodiis interdum accedentibus; capitulis crateriformibus 0,5-0,7 \approx 0,3-0,4 mm. v. sphaericis 0,5 mm. diam., subinde depressis, albis, pulvere calcareo-denso conspersis v. griseis, modo nudatis et iridescentibus; stipite opaco conico, infra nigro, sursum albido, 0,3-0,7 mm. long. 200 μ . basi cr., 80 μ . apice, in columellam densam, albam, producto, interdum columella nulla; nodulis calcareis ad apicem peridii extensis spinulas horizontales 80-100 \approx 20-40 ferentibus, membrana peridii hyalina granulos calcareos includente; sporis sphaericis dense spinulosis, violaceo-brunneis, 11-15 μ . diam.

Hab. in cortice vivo Artocarpi integrifolii, rarius in ramulis dejectis, Peradeniya Ceylon; ad truncos Araucariæ, Thu-yæ etc. in Lusitania. — *Phys. nutanti* v. *leucophææ* proximum.

13. *Physarum vernum* Somm. ap. Fr. S. M. III, p. 146, sec. List., 6008
 Mycetoz. II ed. p. 75, t. 48, *Badhamia verna* Rost. Mon. p. 145 ex p. — Plasmodio albo; peridiis sessilibus, subglobosis, interdum plasmodiocarpicis, oblongis, griseo-albis, 0,5-1 mm. diam., interdum

plura mm. longis, rugulosis; tunica membranacea, pro more granulis calcareis dense referta, interdum (calce absente) iridescente; capillitii floccis brevibus, hyalinis, nodulis copiosis, angulosis, albis connectentibus centroque pseudo-columellam sæpe formantibus; sporis purpureo-brunneis, spinulosis, 9-12 μ . diam.

Hab. in foliis ramisque dejectis in Britannia, Norvegia, Helvetia, Italia, Austria, Lusitania et Cuba. — *Badhamia verna* Rost. ex p. ad *Badh. panicæ* referenda est.

14. *Physarum testaceum* Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30 6009 (1907) Science ser. XII, p. 18, Lister, Mycetoz. II ed. p. 79, t. 54. — Plasmodio?; peridiis sessilibus albis, subglobosis, confertis mutaque pressione polygoniis, 0,7 mm. diam.; tunica exteriore alba, ovi crustæ simili, ab interiore membranacea incolore secedente; capillitio ex nodis calcareis, modo majoribus modo minoribus, albis, angulosis ramosisque constante floccisque connectentibus brevibus; sporis purpureo-brunneis v. griseo-purpureis, spinulosis, 8-10 μ . diam. uno latere conspicue magis spinulosis et saturatioribus.

Hab. ad ligna emortua, Colorado, Ohio, Massachusetts, Vermont, Maine Amer. bor.

15. *Physarum virescens* Ditm. — Syll. VII, p. 341 — var. β *nitens* 6010 List., Mycetoz. p. 59, Torr. Myxom. p. 182. — Peridiis subglobosis, majoribus quam in typo, 0,5-0,8 mm. diam., gregariis v. solitariis, vivide flavis, parum calcigeris; sporis 7-9 μ . diam. — var. γ *obscurum* Lister, Mycetoz. p. 59, Torr. Myxom. pag. 182. — Peridiis subglobosis discretis, levibus, brunneo-olivaceis, 0,5 mm. diam., sæpe plasmodiocarpicis; sporis 6-8 μ . diam.

Hab. in foliis vel lignis putridis, β in America boreali, γ in Britannia et Hungaria.

16. *Physarum alpinum* G. Lister, Journ. of Bot. 48 (1910) pag. 73, 6011 *Ph. virescens* var. *alpinum* List., Journ. of Bot. 46 (1908) p. 216. — Peridiis sessilibus, confertis, subglobosis 1-1,3 mm. diam. v. plasmodiocarpia 2-10 mm. longa formantibus, flavo-ochraceis, levibus v. squamulosis; peridii pariete duplici, exteriore calcareo ab interiore facile secedente; capillitii nodulis calcareis crassiusculis, simplicibus v. ramosis, flavis, floccis firmis hyalinis connexis; sporis globosis purpureo-brunneis, minute verrucosis, 10-15 μ . diam.

Hab. ad folia, gramina in alpinis California, (HARKNESS), Arolla Valesiæ (LISTER), Ste. Croix Jura (MEYLAN). — A *Phys. virescenti* probe distinctum.

PHYSARELLA Peck — Syll. VII p. 352.

1. *Physarella lusitanica* Torrend, Myxom. p. 173, t. IX, f. 12. — 6012

Ab affini *Phys. mirabili* Peck (= *Ph. oblonga* (B. et C.) Morg.) differre videtur peridiis lenticularibus nec breviter cylindraceis, irregulariter dehiscentibus, nec stellatim laciniatis, stipite brevi 0,3-0,5 mm. alto, nec peridio duplo triplove longiore, floccis expansionibus calcareis fusoides carentibus.

Hab. in cortice et foliis acervatis Eucalypti globuli, Alente Lusitaniæ. — Peridium 0,4-0,6 mm. lat., 0,2-0,3 mm. cr.

CRATERIUM Trent. — Syll. VII p. 355, XI p. 463, XIV p. 834.

1. *Craterium concinnum* Rex, Proc. Philad. Acad. (1893) pag. 370, 6018

Torr. Myxom. p. 176. — Plasmodio?; peridiis totis 0,5-0,7 mm. alt., subinfundibuliformibus, levibus, brunneo-olivaceis, sæpe apice pallidioribus, operculo conspicuo convexo albido dehiscentibus; tunica cartilaginea; stipite 0,1-0,3 mm., atro-brunneo, ruguloso; capillitio ex nodulis calcareis minutis angulosis, granulis brunneo-ochraceis repletis constante; sporis pallide brunneis, tenuiter verrucosis, 9-10 μ . diam.

Hab. in spinis involucri Castaneæ, socio *Lachnobolo globoso*, in America boreali.

2. *Craterium paraguariense* (Speg.) Sacc. et Trott., *Didymium para-* 6014

guayense Speg., F. Guar. I (1883) pag. 141, *Craterium rubescens* Rex, Proc. Philad. Acad. (1893) pag. 370, Macbr., Slime-Moulds p. 75, *Jocraterium paraguayense* (Speg.) Torr. Myxom. p. 174. — Plasmodio?; peridiis totis 1-1,5 mm. alt., longe cyathiformi-cylindraceis, rectis, gregariis, 0,6 mm. latis, vivide violaceis, vittis vel reticulis pallide violaceis variegatis; stipite cylindraceo, 0,4 mm. alt., 0,7 mm. cr., opace purpureo, ex hypothallo discoideo oriente; tunica cartilaginea, granulis calcareis copiosis, subreticulatim dispositis farcta; columella e nodulis calcareis ad centrum concretis formata; capillitio e nodis calcareis violaceis inter se filamentis violaceo-hyalinis conjunctis; sporis sublevibus, violaceis, 7-9 μ . d.

Hab. ad folia, cortices putres, Paraguay, Amer. austr. et in Amer. bor.

LEOCARPUS Link — Syll. VII p. 358.

1. *Leocarpus fulvus* Macbr., Amer. Slime-Moulds, pag. 82, t. XVI, 6015

f. 4, Torr. Myxom. p. 171, t. VII, f. 7, *Physarum fulvum* List., Myceto. II ed., p. 60, t. 66. — Plasmodio flavo; peridiis grega-

riis, ovoideis v. globulosis, rubidis v. pallide flavis, irregulariter dehiscentibus; tunica exteriore plus v. minus calcifera, basi in cupulæ formam persistente, tunica interiore tenuissima vix visibili; stipite longo striato, rufo; hypothallo distincto sinuoso, plus vel minus continuo; capillitio copioso pallido v. albo, nodulis calcareis latis flavidis insperso; gleba nigra; sporis atro-brunneis, echinulatis, 13-15 μ . diam.

Hab. in foliis et fragmentis putrescentibus in America bor.

CHONDRIDERMA Rost. — Syll. VII p. 362, X p. 85, XI p. 464, XIV p. 834, XVI p. 822, XVIII p. 210.

1. *Chondrioderma roanense* Rex, Proc. Philad. Acad. (1893) p. 368, 6016 Torr. Myx. p. 167. — Plasmodio?; peridiis sparsis, disciformibus v. leviter convexis, sæpe infra umbilicatis, saturate brunneis, 1 mm. diam.; tunica externa levi, fragili, irregulariter fatiscente, interiore alba punctata, stipite curto, nigro-piceo, longitudinaliter sulcato; hypothallo nullo; columella disciformi, pallide ochracea, capillitii floccis paucis subincoloribus, flexuosis, simplicibus v. furcatis, subinde anastomoticeis; sporis atro-violaceis, verrucosis, 12-14 μ . diam.

Hab. in lignis putrescentibus in America boreali.

2. *Chondrioderma rugosum* Rex, Proc. Philad. Acad. (1893) p. 369, 6017 Torr. Myx. pag. 168, t. V, f. 26. — Plasmodio cinereo; peridiis sparsis v. aggregatis, 0,5-0,6 mm. diam., albis v. griseis, superficie tota rugulis decussatis et areolas 25-30 polyhedralas formantibus percursa; tunica simplici granulis calcareis plus v. minus referta; stipite subulato, nigricante, peridium subæquante; hypothallo nullo; columella elata, alba, globulosa; capillitii floccis albis v. incoloribus, furcatis v. anastomotico-reticulatis; sporis brunneo-violaceis, 8-10 μ . diam.

Hab. ad Muscos in Amer. bor. et insul. Antillis.

3. *Chondrioderma montanum* Meylan, Bull. Soc. bot. Genève (1910) 6018 p. 262. — Plasmodio?; sporangiis stipitatis, raro sessilibus, albis v. roseis, 1 mm. lat.; peridio duplici; cute externa fragili, calcareæ; cuticula interna membranacea, ab externa separabili; stipite flavo-brunneo 0,5 mm. alto; columella sphaerica, magna v. parva, brunnea subinde rufo-brunnea, raro pallida; capillitii tubulis paucis, ramosis, non flexuosis, brunneo-violaceis; sporis globosis, 7-9 μ . diam., brunneo-purpureis, levissime spinulosis.

Hab. ad truncos putres, præsertim fagineos in silvis Jura Helvetiæ. — Inter *Chondr. radiatum* et *Ch. testaceum* fere medium.

COLLODERMA G. Lister, Journ. of Bot. 48 (1910) pag. 312 (Etym. *colla* gluten et *derma*). — Peridia subglobosa, pariete bistratoso; exteriore gelatinoso, cumulis granuliformibus excretæ materiei minutisque granulis calcareis consperso; interiore membranaceo. Capillitium e reticulo floccosum anastomotico-ramosorum purpurascens, absque nodulis calcareis constans. Sporæ brunneo-purpureæ.

1. *Calloderma oculatum* (Lippert) G. Lister, l. c., *Didymium oculatum* C. Lipp., Verhandl. k. k. zool. bot. Gesellsch. Wien, XLIV (1894) p. 72, t. IV — Syll. XI, p. 464.

Hab. in ligno putrescente abietino et inter Muscos in Austria (LIPPERT) et Britannia (W. CRAN). — Peridia 0,5-0,7 mm., sessilia v. raro breve pedicellata, olivaceo-brunnea vel purpureo-brunnea; capillitium purpurascens-brunneolum, extremitatibus hyalinum, basi 2-4 μ . cr.; sporæ spinulosæ 11-13 μ . diam.

PHYSARINA v. Höhn., Stzb. K. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 431 (Etym. a *Physaro* cui affinis). — Peridia stipitata, membranacea, verrucis calcareis cylindraceis conspersa. Capillitium calce carens, tenuiter filiforme. Stipes in columellam excedentem globosam abiens, granulis calcareis, æque ac columella, refertus. Sporæ violaceæ.

1. *Physarina echinocephala* v. Höhn., l. c. p. 432, cum icon., List., Mycetoz. II ed. pag. 117, t. 198. — Gregaria, circ. 800 μ . alta; capitulo circ. 500 μ . diam., globoso-depresso, theobromino-nigricante, verrucis conspicuis cylindraceo-clavatis, 80-100 \times 40-60, roseo-cinereis consperso; stipite albo 400-420 \times 200-250, ruguloso-granuloso; floccis radiantibus erecto-ramosis, vix reticulatis, violaceis; sporis globosis sublevibus, atro-violaceis, 8-9 μ . diam.

Hab. in caulibus putrescentibus, Buitenzorg ins. Javæ.

DIACHÆA Fr. — Syll. VII p. 387, XI p. 465, XIV p. 835.

1. *Diachæa cylindrica* Bilgram, Proc. Ac. Nat. Sc. Philadelphia LVII (1905) p. 524, Torrend Myxom. p. 147. — Plasmodio?; peridiis cylindraceis stipiteque calce carentibus; sporis minutis reticulatis.

Hab. ad fragmenta vegetabilia in America boreali. — Sporis

reticulatis peridiisque cylindricis a ceteris generis speciebus facile dignoscitur.

DIACHÆELLA v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 436 (Etym. *Diachæa*, cui affinis). — *Peridia stipitata*. Stipes cum columella in peridium intrans, glomerulis crystallinis, majusculis, subrotundis refertus. Peridii membrana tenuis, non fragilis, calce carens; stipitis membrana tenuis, molliuscula, calce non v. vix prædita. Capillitium nodulis calcareis expers. Sporæ violaceæ. — Teste List. Mycetoz. II ed., p. 119 genus non satis validum et a *Diachæa* non separandum.

1. *Diachæella bulbilosa* (Berk. et Br.) v Höhn. l. c. p. 436, f. 34, 6022 *Didymium bulbiliosum* B. et Br. — Syll. VII, p. 384 — *Diachæa bulbilosa* Lister in. Penzig Myx. Buitenz. (1898) p. 47.

Hab. in foliis siccis, Ceylon, Java. — Stipes opace albus, 400-500 v 150-200; peridium nigricans e globoso ovoideum 350-400 μ . lat. Capillitii hyphæ reticulato-ramosæ 1-1,5 μ . cr.; sporæ griseo-violaceæ inæqualiter globosæ et irregulariter verrucosæ, 8-8,5 μ . d.

DIDYMIUM Schrad. — Syll. VII p. 375, X p. 85, XI p. 464, XIV p. 835, XVI p. 822, XVIII p. 210.

1. *Didymium Wilczekii* Meyl., Bull. Soc. Vaud. Sc. nat. XLIV (1908) 6023 p. 290. — Plasmodio cinereo, dein saturate cinereo; peridiis albis v. griseolis, semper plasmodiocarpii forma, 1-8 cm. long, 2-8 mm. lat, 0,3-0,5 mm. cr., tunica tenui incolore v. grisea, stellis calcareis majoribus et minoribus v. baculis v. granulis sphaericis (stratum continuum et separabile non formantibus) obducta; capillitio purpureo-brunneo, copioso, floccis verticalibus, valde ramoso-anastomoticeis, subinde reticulum fere formantibus, æqualibus, extremitate decoloratis, non acutatis; columella nulla; sporis globosis, 9-12 μ . diam., tenuiter spinulosis, saturate purpureo-brunneis.

Hab. in ramis caulibusque vetustis. Rubi idæi, Urticæ, Ribis, Loniceræ sub nive deliquescente, alt. 1000-1400 m. in Jura Helvetiæ.

2. *Didymium leoninum* B. et Br., Ceyl. Fungi n. 750, p. 83 (1875) 6024 Torrend, Myxom. p. 156. — Plasmodio?; peridiis totis 1-2 mm. alt., subglobosis, infra planis v. umbilicatis, griseis, tunica cartilaginea aurantiaca v. brunneo-aurantiaca, areolata; stipite concolore, firmo, 0,2-0,4 mm. cr., granis calcareis farcto; columella quoque concolore; capillitio copioso, floccis plus v. minus flexuosis, parce ra-

mosis, brunneo-purpureis vel griseis; sporis e griseo rubentibus, minute spinulosis, 8-13 μ . diam.

Hab. ad cortices, Muscos etc. in ins. Ceylon et Java. — Speciem jam dubiam nuperius recognovit cl. Petch.

3. *Didymium squamulosum* (Alb. et Schw.) Fr. — Syll. VII, p. 377 6025
— var. *claviforme* Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30, (1907), Science ser. XII, n. 1.

Hab. ad ligna etc. putrescentia in Colorado Amer. bor. — Varietas quæ probabiliter peridio clavato esset dignoscenda, in List. Myc. II ed. omissa est.

SPUMARIA Pers. — Syll. VII p. 388, XVIII p. 211.

1. *Spumaria alba* (Bull.) DC. — Syll. VII, pag. 388. — var. *solida* 6026
Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30 (1907), Science Ser. XII, p. 29, Lister, Mycetoz. II ed. p. 138. — Plasmodiocarpis pulvinatis, compactis, 4-5 cm. diam., crystallis calcareis minutis, sæpe nodulosis; capillitio parco, irregulari, hyalino; sporis spinulosis, 9-11 μ . diam.

Hab. in foliis, culmis putrescentibus udis, Colorado Amer. bor.

LEPIDODERMA De Bary — Syll. VII p. 386, XI p. 465.

1. *Lepidoderma Carestianum* Rost. — Syll. VII, p. 387 — var. *flaves* 6027
scens Meylan, Bull. Soc. Vaud. S. N. XLIV (1908) pag. 292. — Columella et facie interiore tunice saturate flavis; granulis calcareis griseo-flavidis; sporis 9-11 μ . diam.

Hab. in ramis Rubi idæi, Jura Helvetiæ.

LEPIDODERMOPSIS v. Höhn. Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 438 (Etym. *Lepidoderma*, cui affinis). — Peridia stipitata, membrana rigidula, cartilaginea, glomerulis stellatis calcareis conspersa. Stipes calce expers, subspongiosus, axi firmiore præditus, apice in columellam globosam granulis calcareis præditam desinens. Capillitium nodulis calcareis expers. Sporæ violaceæ. — A gen. *Didymio* sensu List. vix distinguendum.

1. *Lepidodermopsis leonina* (B. et Br.) v. Höhn., l. c. fig. 35, *Didy-* 6028
mium leoninum B. et Br., List. Mycetoz. II ed. pag. 136, t. 113, *Lepidoderma tigrinum* Rost. p. p. — Syll. VII, p. 386.

Hab. in caulibus emortuis in ins. Ceylon et Java. — Peridium e flavo leoninum, 680 μ . diam. extus glomerulis stellato-spinosis calcareis 40-60 μ . diam. conspersum; stipes 600 \approx 200; capillitium

radians vix ramosum, violaceum, ex floccis 1-1,5 μ . cr. formatum; sporæ violaceæ v. violaceo-griseæ, 7-9 μ . diam., ubique minute verruculosæ.

STEMONITES Gled. — Syll. VII p. 397, X p. 87, XI p. 466, XIV p. 836, XVI p. 823, XVIII p. 211.

1. *Stemonites fusca* (Roth) Rost. — Syll. VII, p. 397 — var. β ni- 6029
græscens Rex, Proc. Philad. Acad. (1891) p. 392) (ut sp.), Torr.
 Myx. p. 141. -- Stipite brevissimo, vix 0,5 mm. longo; peridio
 saturatius nigricante; sporis spinulosis v. reticulatis, 8 μ . diam. —
 var. γ *maxima* Schw. N. Am. Fungi p. 260 (ut sp.), Torr. Myx.
 p. 140. — Peridiis majusculis, 10-15 μ . long.; sporis atro-viola-
 ceis, distincte reticulatis, 5-8 μ . diam.; capillitii areolis 14-50 μ .
 diam.; sporis 8-10 μ . diam. — var. δ *trechyspora* Berk., Torr.
 Myx. p. 141. — Sporis 10-12 μ . diam. fortiter reticulatis, costulis
 1 μ . alt.

Hab. in truncis et caudicibus putrescentibus: β et γ in America boreali, δ in Venezuela.

2. *Stemonites pallida* Wing. in Ell. et Ev. N. Am. Fungi n. 3498, 6030
 Torr. Myx. p. 144, Macbr. Am. Slime Moulds p. 123, t. XIII,
 f. 3 et XVIII, f. 2. — Plasmodio?; peridiis totis 4-6 mm. alt.,
 gregariis, rarius cæspitulosis, rectis, cylindricis, obtusis, brunneo-
 nigricantibus, rubido-iridescentibus, demum pallidis; stipite brevi,
 nigro-nitente, ex hypothallo tenui brunneo-iridescente; columella
 abrupte ante peridii apicem evanida; capillitii floccis prope super-
 ficem tenuiter reticulatis, prope apicem rarescentibus; gleba brun-
 neo-nigricante; sporis opace brunneis, levibus, sub microscopio
 valde augente minutissime parce papillatis, 7,5 μ . diam.

Hab. ad ligna emortua in America boreali.

3. *Stemonites carolinensis* Mac Bride, Slime Moulds, p. 122, t. XIII, 6031
 fig. 5 et XVIII, fig. 1. — Peridiis hinc inde cæspitulosis, minutis,
 cylindræis, sursum tenuatis, ferrugineis dein cinereis v. purpu-
 rascentibus, stipite nigro-nitente, quartam fungilli partem attin-
 gente, levi præditis, hypothallo nigro-brunneo manifesto; colu-
 mella nigra sensim tenuata, denique apicem versus evanescente;
 capillitio denso, interiore ex ramulis pallidis, laxè anastomotidis
 formato, exteriore minute reticulato, areolis 3-15 μ . diam.; sporis
 globosis, levibus, 6-7 μ . diam., pallide violaceo-brunneis, coacer-
 vatis ferrugineis.

Hab. ad fragmenta vegetabilia, South Carolina et Ohio Amer.

bor. (MORGAN). — Teste cl. Torrend, Les Myx. p. 239, forte eadem ac *Comatr. Persoonii* v. *pulchella*, sed teste Lister Mycetoz. II ed. p. 149 non differt a *Stem. pallida* Wing.

4. *Stemonites flavo-genita* Jahn, in Abhandl. Bot. Ver. Brandb. XIV 6032 (1904) p. 165, Torrend, Myxom. p. 144, *St. ferruginea* Fr., non Ehr. — Plasmodio flavo; peridiis 5-8 mm. alt., ferrugineo-cinnamomeis, cylindricis, utrinque obtusis; stipite nigro brevissimo, 0,5-1,5 mm., columella apicem peridii sæpius attingente et tunc dilatato-infundibuliformi; capillitii floccis brunneis v. ferrugineis, nodulis, imprimis introrsum præditis; areolis superficiem versus 6-16 μ . diam.; sporis ferrugineo-pallidis, leniter verrucosis v. sublevibus, 8-9 μ . diam.

Hab. ad ligna putrida in Britannia, Germania, Austria, et in America boreali.

5. *Stemonites ferruginea* Ehr., non Fries. — Ita vocanda *Stemonites* 6038 *Smithii* Mac Bride — Syll. XI, p. 466. — A præcedente differt plasmodio albo, peridio stipiteque longioribus, sporis minoribus, 4-6 μ . diam. — Vulgata in Europa, Asia, Amer. et Oceania.
6. *Stemonites virginienensis* Rex, Proc. Philad. Acad. (1891) p. 391, 6034 Torr. Myx. p. 141. — A *Stem. fusca*, cui valde affinis, distinguitur teste Torrend peridiis brunneis v. rufis, ex ovali elongatis, capillitii areolis minutis, 5-7 μ . latis, sporisque 5-7 μ . diam., laxè reticulatis, areolis tantum 10-12 μ . diam.

Hab. in lignis emortuis in America boreali. — Teste Lister. Mycetoz. II ed. p. 158 est *Comatricha typhina* var. *heterospora* Rex.

COMATRICH Preuss — Syll. VII p. 394, X p. 87, XI p. 466, XIV p. 837, XVIII p. 211.

1. *Comatricha lurida* Lister, Mycetoz. (1894) p. 119, t. 15, f. Ba-c, Torr. 6035 Myx. p. 135. — *Comatrichæ obtusæ* forma globulosa et minutie affinis; differt columella peridii medietatem non superante et sursum in ramulos primarios copiosos et validos usque ad apicem peridii partita, extremitatibus liberis vix curvis; sporis verrucosis.

Hab. ad folia emortua in Britannia.

2. *Comatricha rubens* Lister, Mycetoz. (1894) p. 123, t. 45, f. B d-f, 6036 Torr. Myx. p. 138. — Plasmodio albo-hyalino; peridiis totis 1-2 mm. alt., obovato-ellipsoideis vel subglobosis, rectis vel inclinatis, sparsis, 0,3-0,5 mm. lat., brunneo-roseis, tunica sursum fugaci, inferius membranacea et persistente; stipite setaceo, nitide nigro, 0,5-1,5 mm. alt., ex hypothallo brunneo circulari enascente; co-

lumella ad $\frac{2}{3}$ peridii attingente, apice ramosa; capillitii floccis violaceo-brunneis, primariis crassioribus, sursum sensim tenuissimeque angustatis liberisque, floccis inferioribus tunicæ adhærentibus, ibique dilatatis; sporis globosis, echinulatis, 7-8 μ . diam., pallide lilacino-brunneolis.

Hab. ad folia emortua in Britannia et Amer. bor.

3. *Comatricha typhina* (Roth) Rost. — Syll. VII, p. 394 — var. β 6037 *heterospora* Rex, Amer. Slime-Moulds p. 131, Torr. Myx. p. 136. — Peridio fugaci; sporis tenuiter reticulatis nec non prominenter verrucosis. — var. γ *microspora* List. Mycetoz. pag. 121, Torr. Myx. p. 136. — Peridio fugaci; sporis minoribus, 3,5-4,5 μ . d., tenuiter reticulatis nec non prominenter verrucosis.

Hab. β in lignis putridis in Austria et Amer. bor. γ in foliis dejectis in Britannia.

4. *Comatricha irregularis* Rex, Proc. Philad. Acad. (1891) pag. 393, 6088 Torr. Myx. p. 139. — Peridiis congesto-cæspitosis, atro-brunneis v. nigricantibus, semi-erectis v. nutantibus, 4-5 mm. altis, irregulariter cylindricis, variabilibus, stipitatis; stipite nigro distincto. peridium subæquante; hypothallo brunneo, nitido; columella centrali, tenui, flexuosa, apicem attingente; capillitio laxo, aperto, floccis arcuatim radiantibus, irregulariter reticulato-connexis, brunneis, extrorsum subhyalinis, areolis latis; gleba nigra; sporis læte brunneis, minute verrucosis; 7-8 μ . diam.

Hab. ad ligna et cortices, New England, Kansas, Texas Amer. bor. — Ab affini *C. longa* statura minore, capillitio magis evoluto apicibus liberis brevioribus et subhyalinis.

LAMPRODERMA Rost. — Syll. VII p. 390, XI p. 465, XIV p. 838.

1. *Lamproderma Lycopodii* (Nees) Raunk., in Bot. Tidsskr. XVII, 6039 pag. 90 (1888), *Cribraria Lycopodii* F. Nees in Fr. S. Myc. III, p. 163, *Stemonites cribrarioides* Fr., l. c. — Syll. VII, p. 399. — Plasmodio?; peridiis sparsis, globulosis, sessilibus, hypothallo violaceo-brunneo insertis, concoloribus, basi persistentibus et limbum laciniatum formantibus; columella cylindrica, peridii medium attingentibus; capillitio e columellæ apice oriundo, violaceo-brunneo, externe sensim ramosiore et dilutiore; sporis brunneo-violaceis, tenuiter reticulatis, 12-18 μ . diam.

Hab. in foliis *Lycopodii* sp. in Thuringia et Lyc. annotini, Sjælland Daniæ (RAUNKIÆR).

2. *Lamproderma atrosporum* Meylan in Bull. Soc. Vaudoise de S. N., 6040

XLVI (1910) p. 51. — Plasmodio ætate provecta nigro; peridiis sessilibus v. pedicellatis, 1-3 mm. alt., 1-1,2 mm. diam., globulosis v. oblongis, opace nigris v. parce iridescentibus, tunica fugaci, non membranacea, in areolas minutas disrumpente, rarius membranacea et ad basim relaxata; capillitio nigro v. saturate atro-brunneo, numquam violaceo sed forma et divisione ut in *L. violaceo* v. *Carestiæ*; columella tenui medietatem superante; sporis nigris fortiter spinoso-papillatis v. ob papillas seriatas reticulatis.

Hab. ad fragmenta vegetabilia ad nives alt. 1100-1500 m. in alpihus Jura Helvetiæ.

LINDBLADIA Fr. — Syll. VII p. 408.

1. *Lindbladia effusa* (Ehrb.) Rost. — Syll. VII, p. 408 — var. *simplex* 6011
Rex, Bot. Gaz. XVII, p. 201 (1892) Torr. Myx. p. 81, t. I, f. I, t. II, f. 1. — Peridiis contiguis sessilibus, interdum liberis et breviter stipitatis, stipite brunneo-nigricanti, ruguloso; granulis plasmodiis quandoque superficialibus et seriatas ut in *Cribrariæ* specie quadam.

Hab. ad ligna emortua, imprimis Coniferarum in Amer. bor. et Japonia.

CRIBRARIA Schrad. — Syll. VII p. 412, X p. 90, XI p. 467.

1. *Cribraria rubiginosa* Fr. — Syll. VII pag. 417 — var. *longipes* 6042
Meylan, Bull. Soc. Vaud. Sc. nat. XLIV (1908) p. 294. — Pedicello usque ad 2 v. 3 mm. alto, plasmodio intense purpureo, in peridia tarde mutato.

Hab. in fragmentis vegetabilibus, Côte aux Fées et Chasseron in Jura Helvetiæ.

2. *Cribraria Bieniaszii* (Racib.) Torr. Myxom. p. 74, *Heterodictyon* 6043
Bieniaszii Racib., Hedw. (1889) pag. 121. — A *Cribraria macrocarpa* dignoscitur stipite longiori, 1,5-2,5 mm. alt., calyculi dentibus robustioribus et longioribus conniventibus (ut in *Dictydio*) sporis vivide flavis, levibus 5-7 μ . diam.

Hab. in truncis putrescentibus, Tenczynek Galiciæ occid. (F. BIENIASZ). — Teste List., Mycetoż. II ed. p. 178, hæc species et *Cribr. tatrica* Racib. non satis differunt a *Cribr. macrocarpa*.

3. *Cribraria piriformis* Schrad. — Syll. VII, p. 415. — var. β *maxima* 6044
Torrend, Myxom. p. 77. — Peridiis majoribus, 0,7-1 mm. diam.; nodis variabilibus nunc minutis trigonis ut in *Cribraria tenella*,

nunc majoribus stellatis ut in *Cr. intricata*, stipite robusto. — Var. γ *notabilis* Rex ap. Torrend, Myxom. p. 77. — Peridiis minutis, globulosis 0,3-0,5 mm. diam.; nodis convexis prominentibus, parvis subrotundis v. irregularibus; stipite brevissimo.

Hab. in truncis præsertim Coniferarum; β in Lusitania, γ in America boreali.

4. *Cribraria languescens* Rex, Proc. Philad. Acad. (1891) pag. 394, 6045 Torr. Myx. p. 79. — Plasmodio?; peridiis stipitatis saturate rubris basi violaceo-tinctis, minutissimis, 0,2-0,3 mm. diam., globulosis, nutantibus, solitariis; stipite exili et elato, 2-3 mm., subulato, flexuoso, brunneo-rubido; calyculo concolore nitido, denticulato, granulis perexiguis radiantibus, 0,3-1 μ . diam., consperso, reticuli areolis triangularibus, nodulis polygoniis munitis, filamentis paucis liberis auctis; gleba saturate rubra, dein expallente; sporis subincoloribus, levibus, 5-6,5 μ . diam.

Hab. ad truncos putres in America boreali.

5. *Cribraria violacea* Rex, Proc. Philad. Acad. (1891) p. 393, Torr. 6046 Myxom. p. 80. — Plasmodio violaceo-nigricanti; peridiis totis 0,5-1 mm. alt., globulosis v. ellipsoideis, minutissimis, vix 0,2 mm. lat., saturate violaceis, metallico-nitentibus, rectis vel nutantibus, stipite 0,3-0,5 mm. alt., violaceo-nigricante, subulato; calyculo crateriformi, membranaceo, cyaneo-violaceo, leviter dentato, minutissime plasmodico-granuloso; reticulo rudimentali, areolis latis et irregularibus nodisque trigonis dilatatis prædito; gleba pallide violacea; sporis rubescentibus, subverrucosis, 7-8 μ . diam.

Hab. in truncis vetustis Abietis, Tiliæ etc. in Amer. bor. et Britannia. — Peridii tunica interdum persistens et apice tantum per poros 3-4 dehiscens.

6. *Cribraria colossea* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 6047 (1909) pag. 258. — Hypotallo latissime effuso, 10-50 mm. diam. plus minusve interrupto, matrice arcte adnato, sordide fusco pelucido anhisto; stipitibus confertis, erectis, 4-5 mm. long., 60-65 μ . cr. in vivo teretibus, in sicco longitudinaliter rugulosis sæpeque leniter tortis, opacis, basi subnodulosis atque magis infuscatiss, sursum lenissime attenuatis apiceque abrupte in peridium expansis; peridiis globulosis, non umbilicatis, 400-500 μ . diam., albidis, cortice squarruloso mox frustulatim evanescente, calice destituto tectis; capillitio ex apice stipitis leniter constricto abrupte exsurgente, floccis a basi liberis v. brevissime connatis, subdichotomicè anastomosantibus, nodis eximie triangularibus dilatatis infuscatissque;

sporis pallide ferrugineis 5-7 μ . diam, tenuiter tunicatis, laxè minuteque papillosis.

Hab. ad caudices putrescentes cariosos in silvis prope Formosa, Chaco Argentinae. — Species eximia *Cr. argillaceæ* peraffinis sed certe distincta.

RETICULARIA Bull. — Syll. VII p. 418, XI p. 468, XIV p. 838.

1. *Reticularia jurana* Meylan, Bull. Soc. Vaud. S. N. XLIV (1908) 6048 p. 297. — Plasmodio albo v. albo-cinereo, intra 4-5 dies in peridium mutato, vix 1 cm. lat., 3-5 mm. cr., tunica brunneola parum nitente, fragilissima, et maturitate facillime secedente, intus cuprea nitida; pseudocapillitio satis vario, nunc floccis tenuibus hinc inde dilatato-membranaceis, nunc parietibus pertusis (ut *Enteridii*) formato; sporis globosis, 5-6 raro 7 μ . diam., tenuissime reticulatis, vix papillosis, pallide brunneis.

Hab. ad fragmenta vegetabilia, Granges de S.te-Croix alt. 1200 m. et Chasseron m. 1300-1500 in Jura Helvetiæ. — Sporis minoribus et pallidius coloratis a *R. Lycoperdo* videtur differre, sed cl. Lister, Mycetoz. II ed., ut hujus speciei meram formam e loco aperto censet.

2. *Reticularia lobata* List., Mycetoz. pag. 161, t. LIX B, *Liceopsis* 604: *lobata* (List.) Torr. Myx. p. 121, t. IX, f. 15-16. — Plasmodio albo-hyalino; peridiis globosis 0,3-0,8 mm. diam., solitariis v. irregulariter aggregatis, brunneo-ferrugineis v. nigricantibus, nitidis, sessilibus v. vix stipitatis, tunica tenuiter supra fugaci et glebam ferrugineam pulveraceam ostendente; capillitii floccis raris, hyalinis, 2-4 μ . cr., simplicibus v. anastomoticis, axillis dilatatis; sporis dilute ferrugineis, minute saltem pro parte, reticulatis, 6-10 μ . diam.

Hab. ad caudices vetustos in Britannia, Gallia, Lusitania. — Sec auctorem *Enteridio Rozeano* valde affinis.

LYCOGALA Mich. — Syll. VII p. 435, XI p. 470, XIV p. 840, XVI p. 824.

1. ? *Lycogala Torrendii* Bres. in Torr. Myxom. p. 88, t. IX, f. 19-20. — Plasmodio?; peridiis? solitariis v. gregariis, superficialibus e griseo brunneis, subglobosis v. subconicis, 4-6 mm. diam. vel 5-6 mm. alt. et 3-4 mm. lat., interdum ad basim sulcatis et in pseudostipitem tennatis, leviter pruinosis v. subfloccosis e cute tenuiter dilacerata; gleba dilute rosea; capillitio raro e filamentis

valde tenuibus, paulatim tenuatis, 2 μ . cr., sursum 1 μ . cr., hyalinis, tubulosis, 100-120 μ . long.; sporis ellipsoideis, incoloribus, granulosis 6-7 \approx 3.

Hab. ad terram in cistetis arenosis, S. Fiel et Valle de Rosal Lusitaniæ. — Dubia stirps et vix myxomycetæa; an potius *Ceratomyce* e. g. *Cer. pusillo* affinis?

2. ? *Lycogala terrestre* Fr., Syst. mycol. III, p. 83, Corda Icones 6051 VI, p. 15, t. II, f. 37, Micheli N. Pl. gen. p. 216, t. 95, f. II, 5. — Cæspitosum, obovatum, supra obtusatum, leve dein furfuraceum, primo cinnabarinum, dein virescenti-fuscum v. olivaceo-rufum; gleba carnea, dein obscure carnea; capillitio ramoso plicatoverrucoso, hinc inde intumescenti, albo; sporis subglobosis ex hyalino flavidis, 7-7,5 μ . diam.

Hab. ad terram lutosam foliis dejectis obtectam in Bohemia et Italia. — Certe nil est nisi var. obovata subterrestris *Lycogalactis epidendri*.

TRICHIA Hall. — Syll. VII p. 438, X p. 93, XI p. 470, XIV p. 839, XVIII p. 212.

1. *Trichia contorta* (Ditm.) Rost. — Syll. VII, p. 444 — var. β inconspicua Torr., Myx. p. 115. — Peridiis minutissimis; elateriis levibus, regulariter cylindricis, sæpius sursum inflatis apiceque in acumen breve terminatis; sporis distinctis regularibus. — Var. γ *iowensis* Macbr. Amer. Slime-Moulds p. 211 (ut spec.) t. III, f. 3, t. X, f. 5, Torrend, Myx. pag. 115, t. IV, f. 37. — Elateriis 3 μ . cr. spinulis curvis, sæpe 2-3-fidis, 3-6 μ . longis conspersis; sporis 9-11 μ . diam.

Hab. ad ligna et cortices putres, β in Europa et Amer. bor., γ in Amer. bor.

2. *Trichia lutescens* List., Journ. of Bot. XXXII (1897) pag. 216, 6053 Torr., Myxom. pag. 116, *Tr. contorta* γ *lutescens* Lister, Mycetoz. p. 169. — Ab affini *T. contorta* dignoscitur peridiis plerumque globosis, vivide vitellinis, 0,2-0,7 mm. diam., tunica granulis calceis experte et elateriis semper levibus, magis regularibus, brevissimis et furcatis.

Hab. ad ligna emortua in Britannia, Norvegia, Lusitania.

3. *Trichia pulchella* Rex, Proc. Acad. Philad. 1893, p. 366, Torr., 6054 Myxom. pag. 113. — Δ persimili *Trichia affini* distingui videtur peridiis magis sparsis, elateribus angustioribus, vix 3-4 μ . cr., sporis

paullo minoribus, 12 μ . diam., reticuli areolis paucis 3-4 in quoque hemisphærio, costulis punctatis.

Hab. in lignis emortuis in America boreau.

4. *Trichia Stuhlmanii* Eichelb., Verh. Naturw. Ver. Hamburg, 3 Flge. 6055 XIV (1906) p. 32. — Plasmodio hemisphærico rubente, 470? μ . d.; stipite primum albo, subdiaphano, dein chalybeo rigidulo, 200 \times 34, apice capitulum globosum aurantio-rubrum, 196 μ . diam. gerente; capillitii floccis e spiriculis 3-4 densissime convolutis formatis, 4 μ . diam.; sporis globosis, flavis, 8,5 μ . diam., tunica fortiter spinulosa.

Hab. in lignis vetustis, Amani Usambara Afric. orient. — Capitulum demum valde ampliatum, usque ad 430 μ . diam. et saturate rubro-brunneum æque ac stipes qui valde brevatur (vix 64 μ . long.). Habitus fungilli junioris fere stilbeus. — Testè Lister, Myceto. ed. II, p. 216, non satis differt a *Trichia fallace*.

HEMITRICHIA Rost. (1873), *Hemiarcyria* Rost. (1875) — Syll. VII p. 446, X p. 98, XI p. 471, XIV p. 839, XVIII p. 212.

1. *Hemitrichia Karstenii* (Rost.) Lister, Myceto. I ed. p. 228, *Hemiarcyria Karstenii* Rost. — Syll. VII, p. 448 — var. *lutescens* Torr., Myx. pag. 106. — Peridiis v. plasmodiocarpis flavo-aureis, granulis calcareis carentibus.

Hab. in cortice Eucalypti, Quercus etc. in Lusitania.

2. *Hemitrichia helvetica* Meylan, in Bull. Soc. Vaud. de S. N. XLVI 6057 (1910) p. 54. — Plasmodio?; peridiis sessilibus, globulosis, aggregatis, flavo-aurantiacis, 0,5-1 mm. diam.; tunica peridii nitida, irregulariter disrupta, non papillosa nec reticulata; gleba flavo-aurantia v. rubido-ochracea, quam *T. affinis* saturatiore; elateriis 4-5 μ . cr.; extremitatibus plerumque liberis; spiris 4-5 regularibus, confertis, non spinosis; sporis globosis, reticulatis, 11-15 μ . diam., quoque hemisphærio marginulo 0,5-1 μ . cr. ornatis et 2-4 areolas præbentibus.

Hab. ad Muscos in trunco fagineo putri, Chasseron, alt. 1800 m., Jura Helvetia.

3. *Hemitrichia minor* G. List., Journ. of Bot. XLIX (1911) p. 62, 6058 Myceto. II ed. p. 225, t. 187. — Plasmodio?; peridiis stipitatis v. sessilibus, sparsis v. per paria approximatis, subglobosis, 0,2-0,4 mm. diam., nitidulis, pallide flavo-fulvis; tunica membranacea, pallide flava, minute papillosa v. plicis tenuissimis curvis signata et grumulosa; stipite cylindræco, nigro, 0,1-0,2 mm. alt. intus a-

tro-grumuloso; capillitii floccis laxè reticulatis, flaccidis, flavidis, 3-4 μ . cr., apicibus liberis paucis v. numerosis, spiriculis 3-4 exiguis, modo levibus, modo spinulis crebris 1-4 μ . longis donatis sæpeque vesiculoso-dilatatis; sporis pallide flavis, minute denseque verruculosus, 9-10 μ . diam.

Hab. ad cortices emortuos inter Hepaticas, Tanabe Kii Japoniæ (K. MINAKATA).

4. *Hemitrichia lejotricha* Lister, Mycetoz. II ed. pag. 224, tab. 172, 6059

Hem. intorta var. *lejotricha* List., Mycetoz. I ed. p. 176. — Plasmodio aquose albo; peridiis stipitatis, raro sessilibus, sparsis, subglobosis, 0,5-0,9 mm. diam., nitidulis, flavidis v. olivaceis, tunica pro more duplici, externa grumulis atro-brunneis referta; interiore diaphana, crescentiis sparsis anulatis v. semilunaribus prædita; capillitii floccis intricato-contortis, parce ramosis, levibus, flavidis, apicibus liberis acuminatis v. obtusis, spiriculis 3-6 donatis; sporis flavis v. olivaceis, minute verrucosis, 9-13 μ . diam.

Hab. in foliis ramisque dejectis in Britannia, Suecia, Germania, Ceylon.

ARCYRIA Hill. — Syll. VII p. 425, X p. 92, XI p. 469, XIV p. 839, XVIII p. 212.

1. *Arcyria ferruginea* Saut. — Syll. VII, p. 431 — var. β *helvetica* 6060

Torr., Myx. p. 98, t. III, f. 14. — A typo differt floccis interdum 3 μ . cr., remote dilatato-nodosis, nodis 1 μ . diam., globulosis vel ovoideis, spinulis vel reticulo præditis; sporis 10-12 μ . diam. — Var. γ *cornuvioides* Rac., Hedw. XXVIII (1889) pag. 123, Torr., Myx. pag. 98. — Gleba brunneo-cinnamomea (non rubescente v. ochracea); capillitio ut in typo; sporis minoribus 6,5-8,5, levibus. — Var. δ *Gabriellæ* Grove, Fauna of Midl. Plateau: Mycetoza p. 20 in Birmingh. Nat. Hist. and Philosoph. Soc. (1910). — Capillitio speciei sed floccis partis inferioris pallidioribus et tenuioribus, sensim versus partem superiorem crassioribus et saturatioribus spinisque brevibus dense conspersis; peridii interiori parte reticuli areolis rotundis densis prædita, exteriori tenuiter papillosa; sporis tenuiter verrucosis. — Ab affini *Heterotrichia Gabriellæ* recedere videtur colore atro-rubro, nec flavido-brunneo et floccorum liberorum paritate.

Hab. ad truncos, caudices emortuos, var. β in Helvetia, γ in Polonia, δ in Britannia.

2. *Arcyria adnata* (Batsch) Rost. — Syll. VII, p. 428. — var. *hel-* 6061

vetica Meylan, in Bull. Soc. Vaud. S. N. XLVI (1910) p. 55 (*A. incarnata*). — Peridiis globulosis purpureis iridescentibus, pedicello 1 mm. alto præditis, tunica persistenti integra.

Hab. ad Muscos in trunco vetusto fagineo, Chasseron, alt. 1800, Jura Helvetiæ.

3. *Arcyria anulifera* Torr., Myx. pag. 102, Lister, Mycetoz. II ed. 6062 p. 239, t. 185. — Plasmodio?; peridiis sparsis, stipitatis, subglobosis v. ovoideis 0,5-0,6 mm. diam., flavo-fulvellis; tunica membranacea, papillosa, fulva, diu persistente, crassiuscula, ambitu irregulari, deorsum plicata; stipite fulvo, 0,2-0,4 mm. alto, cellulis sporomorphis (?) referto; capillitii floccis reticulatis, flaccidis, flavidis, 1-1,5 μ . cr., hinc inde anulis crebris prominulis, 1 μ . cr. ornatis; floccis basalibus 2 μ . cr., paullo crassius anulatis, submoniliformibus; sporis pallide flavis, sublevibus v. parcissime verruculosis, 6-7 μ . diam.

Hab. in foliis Pini Pinastri, Pinhal d'El-Rei, Lusitania. — Teste cl. Torrend ad *Lachnobolium* nutat.

4. *Arcyria glauca* Lister ap. Minakata in Bot. Mag. Tokyo XXII 6063 (1908) p. 322 et Mycetoz. II ed. p. 241, t. 182. — Plasmodio?; peridiis stipitatis, in cæspitulos 4-20 congestis, ovoideis v. cylindraceis 0,4-2,5 mm. alt., 0,4-0,8 mm. lat. pallide glaucis; tunica membranacea, infundibuliformi, subnutante, minute reticulata; stipite pallide viridi v. griseo-brunneo, curvulo, subflaccido, 0,2-0,3 mm. alt., cellulis sporomorphis (?) referto; capillitii floccis reticulatis elasticis, 0,5-3 μ . cr., calyculo adfixis, apicibus liberis paucis spiriculis laxis prominulis, modo levibus, modo spinulosis; sporis pallide glaucis, sublevibus, 7 μ . diam.

Hab. ad ligna emortua præsertim Machili Thunbergii, Kii Japoniæ (MINAKATA).

5. *Arcyria stipata* (Schw.) Lister Mycetoz. II ed. p. 243, *Hemiarcyria stipata* (Schw.) Rost., Monogr. App. p. 41, 42, *Leangium stipatum* Schw., Syn. N. Am. Fungi p. 258 (1834), *Hemitrichia stipata* (Schw.) Macbr., Am. Slime-Moulds, p. 204, t. I, f. 8, Torr. Myxom. p. 107, t. III, f. 24-26. — Plasmodio?; peridiis 1,5-2 mm. alt., aggregatis, cylindraceis v. irregularibus, vivide rubido-cupreis vel brunneis, carmineo-inspersis; stipite concolore, cellulis sporomorphis farcto, ex hypothallo membranaceo oriundo; tunica tantum basi persistente, calyculiformi; capillitio concolore ramosissimo reticulum elasticum laxum formante, floccis extremitate liberis et bulbosis, spiralibus parum distinctis, spinulis verrucisque consper-

sis; gleba rubescente; sporis pallide rubellis, 6-8 μ . diam., sublevibus.

Hab. ad ligna emortua in Amer. bor., Anglia, Ceylon. — Ad genus *Hemiarcyriam* nutat.

6. *Arcyria magna* Rex, Proc. Acad. Philad. (1893) pag. 364, Torr., 6065
Myxom. p. 97. — Ab *Arcyria nutante* differt colore cinereo vel cinereo-fulvo (roseo in var.); calyculo non reticulato, nec papilloso; stipite longiore, usque ad 1 mm., rubello; floccis evidentius spinulosus.

Hab. ad ligna emortua in Amer. bor. — Var. *rosea* Rex, l. c.
— Peridio roseo. Cum typo

7. *Arcyria occidentalis* (Macbride) Lister, Mycetoz. II ed. pag. 245, 6066
t. 192, *Lachnobolus occidentalis* Macbride, Slime-Moulds p. 188, t. II, f. 2 et 4 (1899) Torr., Myxom. p. 95, t. III, f. 4-5. — Plasmodio?; peridiis globulosis v. cylindricis, 0,5-1 mm. diam., solitariis v. gregariis sed non aggregatis, breviter stipitatis, roseis v. incarnatis, dein brunneo-ochraceis, tunica tenuissima, diaphana, pruinosa, vertice fugaci, basi cupuliformiter persistente; capillitii floccis hinc constrictis; inde dilatatis, verrucosisque, tunice punctis pluribus adherentibus; gleba incarnata; sporis incoloribus, levibus, 7,5-9 μ . diam.

Hab. ad ligna emortua in America boreali.

8. *Arcyria minor* Schw., Syn. Am. bor. p. 259 (1834) Morgan in Journ. 6067
Cincinnati Soc. H. N. 16 (1893) p. 25, t. I, f. 17. — Peridio ovoideo-oblongo, e rubro brunneo, calyculo minuto sulcato-granuloso prædito; stipite brevi, 0,4-0,7 mm. alt., erecto, brunneo-rubro, capillitio demum elongato-cylindraceo, usque ad 1,5-3 mm.; floccis uniformiter 2,3-3 μ . cr., semi-anulis prominentibus serialiter spiralibus donatis; sporis globosis, levibus, 7-9 μ . diam.

Hab. ad ligna et Polyporos putrescentes in America boreali.
— Probabiliter var. *Arc. adnata*.

9. *Arcyria lilacina* Quél., Assoc. Franc. Advanc. Sc. XIII (1884) p. 8, 6068
t. VIII, fig. 16. — Peridiis cylindraceis, tenuibus, 1,5 mm. alt., valde fugacibus, griseo-lilacinis; stipite brevi, vix 0,5 mm., saturate violaceo nitido e thallo argenteo oriundo; capillitio e reticulo granuloso et plicato, griseo-lilacino conflato; sporis sphaericis, 6 μ . diam., tenuissime asperulis, opalinis.

Hab. caespitosa v. aggregata in lignis putridis, Gironde et Vosges Galliae (FORQUIGNON). — Affinis *Arcyria cinerea*.

PERICHÆNA Fr. — Syll. VII p. 420, X p. 91, XI p. 468, XIV p. 839, XVIII p. 213.

1. *Perichæna depressa* Lib. — Syll. VII, p. 420. — var. *quadrata* 6069 (Macbr.) Torr., Myx. p. 92, *Per. quadrata* Macbr., Amer. Slime-Moulds p. 184. — Peridiis rubidis v. brunneis, quadrangularibus, exiguis, vix 0,5 mm. diam.; capillitio raro; sporis dilute flavis, 9-11 μ . diam.

Hab. ad truncos in Pennsylvania, Ohio, Illinois, Missouri Amer. bor.

2. *Perichæna Krupii* Racib., Hedw. XXVIII, p. 124 (1889) Torr., 6070 Myxom. p. 94. — Plasmodio?; peridiis brunneo-avellaneis, sæpius vero plasmodiocarpis vermicularibus, 10-15 mm. long., modo anulatim dispositis, interdum globoso-depressis 0,5-1,5 mm. diam., solitariis; tunica simplici minute verrucosa operculo dehiscente, intus tumentis vesicularibus 2-12 \times 1-3 conspersa; capillitio tunicæ magna ex parte adhærente, floccis tenuibus 0,5-1,5 μ . diam., copiosissimis, parce ramosis, levibus v. verrucosis v. minute denticulatis; sporis brunneo-flavidis, tenuiter verrucosis, 7-8,5 μ . diam.

Hab. ad cortices in Polonia. — Species ulterius inquirenda.

3. *Perichæna pulcherrima* Petch, Ann. R. Bot. Gard. Peradeniya 6071 IV, Pt. V (1909) p. 305. — Peridiis sphaericis, 0,3 mm. diam. v. oblongis 0,7 mm. long., 0,3 mm. cr., sessilibus in hypothallo irregulari nitente insertis v. sparsis, breviter stipitatis, capitulo globoso 4 mm. diam.; stipitibus interdum connatis et peridia 2 vel 3 ferentibus; membrana nitida purpurea v. rubro-brunnea, duplici, exteriori purpurea granulosa, interiori tenui hyalina sæpe hexagono-reticulata; stipite 0,3 mm. long. 0,1 mm. diam., striato, brunneo v. rubro-brunneo, intus granuloso; capillitio ex floccis ramosis pallide brunneis irregularibus 4 μ diam. hinc inde inflatis formato et verrucis minutis spinulisque obtusis consperso; sporis globosis 15-17 μ . diam., brunneolis crebre, spinulosis.

Hab. in ramis emortuis Theobromæ Cacao et Erythrinæ lithospermæ, Ukuwela, Ceylon.

CORNUVIA Rost. — Syll. VII p. 423, X p. 92.

1. *Cornuvia metallica* (B. et Br.) Rost. — Syll. VII, pag. 423 — 6072 var. *intermedia* Meylan, in Bull. Soc. Vaud. S. N. XLVI (1910) p. 56 (*Margarita*). — Plasmodio primitus albo dein flavo v. roseo demum brunneo; plasmodiocarpis sinuosis 2-15 mm. longis, 0,5-1,5 mm. lat., cupreis, tarde maturescentibus; capillitio bene evo-

luto, modo granuloso, modo levigato et hinc inde anulato-incrasato; sporis granulosis.

Hab. ad caudices vetustos udos, alt. 1000-1300 m., Jura Helvetiæ.

DIANEMA Rex, Proc. Acad. Philad. (1891) p. 397 (Etym. *dia* trans, per et *nema* filum, floccus). — Peridia sessilia v. plasmodiocarpa; tunica membranacea v. cartilaginea. Capillitium ex foccis fere rectis, tenuibus, peridii parti superiori et inferiori affixis formatum.

1. **Dianema Harveyi** Rex, Proc. Philad. Acad. (1891) p. 379, Torr., 6073 Myx. p. 84. — Plasmodio?; peridiis subrotundis v. convexis, 1 mm. diam. v. plasmodiocarpis in ferrum equinum curvatis, sordide rubris v. æneis, tunica membranacea diaphana irregulariter dehiscente; capillitii floccis simplicibus v. apice furcatis, ochraceis, 1,5-2 μ . cr.; gleba ochracea v. lateritia; sporis pallide flavis, e sublevi subechinulatis, liberis, 8-10 μ . diam.

Hab. in lignis emortuis in America bor. et Britannia.

2. **Dianema corticatum** Lister, Myceto. p. 205, t. 77 B, (1894) Torr. 6074 Myx. p. 84, t. II, f. 13-15. — Plasmodio roseo; peridiis hemisphaericis, 1 mm. diam. v. plasmodiocarpis elongatis v. subreticulatis, 2-12 mm., castaneo-brunneis; tunica duplici, exteriore cartilaginea, olivacea v. ochracea, granulifera, interiore contigua hyalina; capillitii floccis brunneis v. pallidis, nodulosis v. interdum spiriculas 1-3 præbentibus; gleba brunneo-rubida; sporis subincoloribus, uno latere verruculosus, subellipsoideis, 10-12 \times 8-9, in glomerulos 4-6 junctis.

Hab. in lignis putridis in Britannia, Scandinavia, Helvetia.

LAMPRODERMOPSIS C. Meylan, in Bull. Soc. Vaud. S. N., XLVI (1910) p. 56 (Etym. *Lamproderma* et *opsis* aspectus). — Peridia sessilia v. pedicellata, globulosa; tunica peridii nitore metallico prædita, membranacea, persistente; columella nulla. Capillitium ex inferiore peridii parte oriens, floccis ut in *Lamprodermate*. — Absentia columellæ et capillitii originis situ ab hoc genere distinguitur, sed, teste Lister, cum gen. *Dianema* potius congruit.

1. **Lamprodermopsis nivalis** Meylan, l. c. p. 56-57, *Dianema nivale* 6075 List., Myceto. II ed. pag. 258. — Plasmodio?; peridiis discretis, sessilibus v. pedicellatis, 1-1,5 mm. diam., globulosis, fulvis, metallicis, stipite concolore usque ad 1 mm. alt., tunica peridii membranacea, levi, basi diu persistente; columella nulla; capillitii floccis

iterato-ramosis, ramis ultimis anastomaticis, permanentibus et spongillæ faciem præbentibus, levibus, subinde undulatis; sporis pallide fulvis, subdiaphanis, minutissime papillosis, 10-12 μ . diam.

Hab. in culmis vetustis Graminearum prope et sub nive pr. Ste-Croix, alt. 1200-1280, Jura Helvetiæ.

LISTERELLA Jahn, Ber. d. Deutsch. Bot. Ges. XXV (1906) p. 540 (Etym. a cll. ARTHURO et GULIELMA LISTER filia, Myxomycetum eximiis monographis). — Peridia in lobos dehiscencia, tunica membranacea, calcifera. Capillitii flocci moniliformiter incrassati. Sporæ pallide umbrinæ.

1. *Listerella paradoxa* Jahn., l. c. p. 540. — Peridiis hemisphæricis, 6076 minutissimis 0,2-0,3 mm. diam., nigris, tunica copiose granuloso-calcifera; capillitii floccis tenuissimis, tunicæ parieti interiori adfixis, incrassato-moniliformibus; sporis pallide argillaceo-umbrinis, fere levibus, 7-8 μ . diam.

Hab. in thallo *Cladoniæ rangiferinæ* in Germania.

Fam. 2. Plasmodiophoraceæ ZOFF. ()*

TETRAMYXA Göbel — Syll. VII p. 465.

1. *Tetramyxa Triglochinis* Molliard, Bull. Soc. bot. Fr., LVI (1909) 6077 p. 23. — Axem inflorescentiæ in formam fusoideam tumefaciens, tumoribus 2,5 mm. cr., 1-1,5 cm. long, flores quoque deformans; sporis intracellularibus e plasmodio ortis, initio in formam tetricam junctis, 4,5 \approx 3, maturitate secedentibus.

Hab. in axe inflorescentiæ *Triglochinis palustris* in pratis Saint-Nectaire, Puy-de-Dôme Galliæ. — A *Tetr. parasitica* imprimis differt sporis maturitate secedentibus.

LIGNIERA Maire et Tison, in C. R. Acad. Sc. Paris, (1911) 23 Janv. p. 1 (extr.) (Etym. a cl. prof. O. LIGNIER gallico). — In cellulis

(*) De Plasmodiophoraceis et generibus affinis v. excludendis cfr. doctam revisionem criticam cll. R. MAIRE et ADR. TISON, *La cytologie des Plasmodiophoracées et la classe de Phytomyxinae*, in Ann. mycol. VII (1909), p. 226-253, cum iconibus.

hospitis immutatis parasitans, nec tumores gignens; schizogonia reducta; sporæ in acervulos valsiformes conjunctæ.

1. *Ligniera radicalis* Maire et Tison, l. c. — Sporis levibus, 4-5 μ . 6078 diam., in acervulos rarius cavos conjunctis.

Hab. in radicibus *Callitriches stagnalis* in Gallia.

2. *Ligniera Junci* (Schwartz) Maire et Tison, l. c., *Sorosphaera Junci* 6079 Schwartz, in *Annals of Bot.* XXIV (1910) pag. 236 et 511. — Sporis levibus 5-7 μ . diam. in acervulos sæpius cavos conjunctis.

Hab. in radicibus *Junci bufonii*, obtusiflori, lamprocarpi in Britannia.

3. *Ligniera verrucosa* Maire et Tison, l. c. — Sporis crasse verrucosis, 4-5 μ . diam. in acervulos planos conjunctis. 6080

Hab. in radicibus *Veronicæ arvensis* in Gallia.

SPOROMYXA Léger, C. R. Ac. d. Sc. Paris CXLV (1907) pag. 837 (Etym. *spora* et *myxa* mucus). — Genus endoparasiticum in insectis. Status vegetativus: corpuscula ovoidea vel sphaerica 1-nucleata, 8 μ . longa; status reproductivus: myxoamœbæ 2-8 nucleatæ sphaericæ, majusculæ. Sporæ ex his amœbis schizogoniâ binaria v. plastotomiâ nascentes, ovoideæ, 10 \times 8, tunica jodi et acidi sulphurici ope cyanescente præditæ, plerumque 1-nucleatæ. Sporangia nulla.

1. *Sporomyxa Scauri* Leger, l. c. p. 837. — Characteres generis. 6081

Hab. in organis genitalibus, adipe et sanguine Scauri tristis (Coleopteri) in Algeria. — Hucusque unica forma endozoica inter Myxomycetes. — Genus *Sphaeractinomyxon* Caullery et Mesnil (C. R. Soc. Biol. Paris LVI (1904) p. 408) a quibusdam ad Myxomycetes relatum, est potius Myxosporidiis (animalibus) adscribendum. *Sphaeract. Stolci* Caull. et Mesn. l. c. parasitatur in animalculis Tubificidis ad Cap de la Hague Gallia.

OPHRYOMYCES Léger et Hesse, C. R. Acad. Sc. Paris tom. 149 (1909) p. 303 (Etym. ex habitu in memoriam revocante schizogregarineam *Ophryocystis*). — Adsunt status vegetativus et sporæ confluendo colonias cupuliformes plus minus elongatas formantes. Sporæ e fusione (*synkaryon*) duarum cellularum proximarum oriuntur. — Genus omnino dubium.

1. *Ophryomyces Dorci* Léger et Hesse, l. c. — Cellulis vegetativis 6082 globulosis 6-8 μ . diam., matricis epithelio rhizarum ope adherentibus, divisione se multiplicantibus et quasi plasmodia forman-

tibus; sporis maturis ovoideis, $12 \approx 9$, tunica levi, hyalina, resistente præditis, 1-nucleatis.

Hab. in canaliculis Malpighianis Dorci parallelepipedii (Coleopteri) in Gallia.

MYXOMONAS Brzezinski, in Bull. Inst. Ac. Sc. Cracovie (1906) p. 139 (Etym. *myxa* mucus et *Monas*).

1. **Myxomonas Betæ** Brzezinski, l. c. — Auctor describit stirpis suæ 6083 cyclum extensum evolutionis: zoosporas, plasmodia, cystes, zoosporangia, sporas, sed ex inquisitionibus, ut videtur, diligentissimis a cl. Dr. J. Trzebinski editis in Zeitschrift f. Pflanzenkrank. XVII (1908) p. 321, demonstratur Myxomonadem non esse organismum proprium sed tantum formas varias elementorum cellularium e necrosi partium deformatorum.

Hab. in radicibus aliisque partibus Betæ vulgaris var. Rapæ, cui morbos varios afferret in Rossia et verisimiliter in tota Europa; morbi vero qui aliis causis adscribendi sunt.

MYXOBACTERIACEÆ Thaxt. (*)

Syll. XI p. 460, XIV p. 842, XVIII p. 217.

CHONDROMYCES B. et C. — Syll. IV p. 576, XI p. 460, XIV p. 842, XVIII p. 217.

1. **Chondromyces crocatus** B. et C. — Syll. IV, p. 576, XI, p. 461. 6084 — Acervuli 300-600 μ . alt.; cystophora simplicia v. parce ramosa, 15-60 μ . cr.; cystes versiformes, $30 \approx 10$ -15 in capitula pedicellata 80-100 μ . diam. junctæ; baculi 2-3 μ . long.

Hab. in fimo, fructibus putridis etc. in Amer. bor. et ins. Java.

2. **Chondromyces aurantiacus** (B. et C.) Thaxt. — Syll. XI, p. 460 6085 — *Stigmatella aurantiaca* B. et C. — Syll. IV, p. 680. — Cy-

(*) Cfr. Synopsis generum et specierum a cl. ALFR. QUEHL exhibitam, titulo *Untersuchungen über die Myxobakterien* in Centralbl. für Bakter. II Abt. XVI (1906) p. 9-34, cum tab. col. et fig.

stophora pro more simplicia, 200-400 μ . longa; cystes e globoso ovoideæ in cystophoro sessiles, 25-50 μ . diam.; baculi 2-3 \approx 0,6.

Hab. in Lichenibus et Fungis putridis, fimo, lignis udis etc. in Amer. bor., ins. Java, Austria.

3. *Chondromyces lichenicola* Thaxt. — Syll. XI, p. 461 (nomen). — 6086

Læte ruber in brunneolum transiens, cystibus globosis, 25-45 μ . diam., partim in substrato sessilibus, partim breviter pedicellatis, non raro pluribus lateraliter fatiscentibus; baculis 2-3 μ . longis.

Hab. in Lichenibus viventibus, quos destruit, in Amer. bor. (THAXTER) et in fimo cuniculino prope Berolinum Germaniæ (QUEHL).

4. *Chondromyces serpens* Thaxt. — Syll. XI, pag. 461 (nomen). — 6087

Pallide roseus v. in atro-rubrum nutans, arescendo valde atratus, 1 mm. lat., ex baculorum sacculis intestiniformibus varie inter se contortis formatus; baculis brevibus, 2-3 μ . long.

Hab. in lichenibus corruptis in Amer. bor. (THAXTER) et in fimo cuniculino prope Berolinum Germaniæ (QUEHL).

5. *Chondromyces glomeratus* Zederb., Sitzb. k. Ak. d. Wiss. Wien, 6088

CXII Abt. I (1903) p. 477, t. II, fig. 6-20. — Acervulis sessilibus versiformibus, sæpe verticaliter oblongis, 2-5 mm. alt., confluenso pulvinato-lobulatis, e roseo purpurascens, subtrebelliformibus, ex mucedinea cum bacteriacea symbiotice connexis, teste auctore, constantibus; Mucedinea (*Dendrodochii* sp.?): hyphis septatis, 1,5-3 μ . cr., conidiophora compacta ascendencia gerentibus; conidiophoris pluries dichotomice ramosis; conidiis solitariis vel breviter catenulatis, continuis, e globoso ovoideis, 7-12 μ . long., brunneolis; Bacteriacea: (*Bacillus Chondromycetis-glomerati* Zederb. l. c.); baculis oblongis utrinque rotundatis, 2 \approx 0,5-1, subinde curvulis, ciliis (?) 4-5 tortuosis exilissimis longis ornatis, materiam roseam labilem secernentibus.

Hab. in truncis fagineis locis udis aliquot, Wienerwald Austriae. — Genesis fungilli iterum inquirenda et confirmanda!

POLYANGIUM Link — Syll. VII p. 47, XIV p. 38 et 844, XVIII p. 219.

1. *Polyangium vitellinum* Link — Syll. VII, p. 47. — *Myxobacter* 6089

aureus Thaxt. — Syll. XI, p. 461 (nomen). — Baculorum cumulis ante maturitatem albis, dein in fragmenta numerosa, globosa, 100-300 μ . diam., mox membrana aurea (cystica) induta secedentibus;

cystibus his 1-8 v. pluribus coloniam 1-4 mm. latam formantibus et diutinus strato subgelatinoso obductis; baculis 1,2-3 \approx 0,4.

Hab. in lignis, corticibus udis jam aqua immersis in Europa et Amer. bor.

2. *Polyangium sorediatum* Thaxt., Bot. Gaz. XXXVII (1904) p. 414, 6090 t. 27, f. 22-24, Quehel l. c. p. 17. — Læte aurantio-rubrum, ambitu circulari, 200-400 μ . diam., intus compactum ex cystibus minutis 6-10 μ . cr., polygonio-applanatis, membrana distincta præditis, baculos 1 μ . long. continentibus, baculis vegetativis 3-5 \approx 0,8.

Hab. in fimo cervino prope Berolinum Germaniæ et in fimo cuniculino in America boreali, rarius. — Ad hoc genus quoque spectat: *Polyangium fuscum* (Schröt.) Thaxt., l. c. p. 414 = *Cyctobacter fuscus* Schröt. — Syll. VIII, pag. 1035.

3. *Polyangium compositum* Thaxt., Bot. Gaz. XXXVII (1904) p. 413, 6091 tab. 27, f. 29-30. — Flavido-aurantiacum, subinde arescendo rubrum; acervulis 100-170 μ . diam., ex 4-6 cystibus 75-100 μ . d. subrotundis, mucoso-obvolutis constantibus; cystibus in numerosissimas cystes secundarias, inæqualiter polygonias 10-15 μ . diam. divisas.

Hab. in fimo cuniculino in America boreali.

4. *Polyangium simplex* Thaxt., Bot. Gaz. XXXVII (1904) pag. 414, 6092 *Myxobacter simplex* Thaxt. — Syll. XI, p. 461. — Læte rubescenti-flavum; cystibus tenuiter tunicatis, simplicibus, majusculis, inæqualiter rotundatis, 250-400 μ . diam.; baculis in copiosos minutos glomerulos, intus carneos coalescentibus, 1,2-3 \approx 0,4.

Hab. in lignis et corticibus putridis udis in Amer. bor. et Germania.

5. *Polyangium primigenium* Quehl, Centralbl. f. Bakter. II Abt., XVI 6093 (1906) p. 16. — Rubido-brunneum, siccitate atro-brunneum; acervulis irregulariter rotundatis, grumosis, usque ad 1 mm. diam., discretis intus æqualiter rubentibus, e baculis brevibus, 3-4 μ . longis formatis.

Hab. sat frequens, in excrementis Cuniculi pr. Berolinum in Germania.

MYXOCOCCUS Thaxt. — Syll. XI pag. 480, XIV pag. 843, XVIII p. 318 (*).

(*) Species in Syllog. vol. XX, p. 175, lin. 1-29 perperam citatæ sub gen. *Myxobacter* adscribendæ sunt gen. *Myxococco*.

1. **Myxococcus rubescens** Thaxt. — Syll. XI, pag. 460 (nomen). — 6094
Acervulis ex albedo atro-rubescens, magnitudine valde ludibundis, 100-1000 μ . diam., membrana nulla distincta; baculis vegetativis 4-7 \times 0,5-0,8; sporis 1-1,2 μ ., initio resistentibus, dein aere udo sensim diffluentibus.

Hab. in lichenibus, charta, fimo, fungis putrescentibus in Amer. bor. et in Germania. — Teste Quehl, *Myxococcus ruber* Baur non satis differt.

2. **Myxococcus ruber** Baur, Arch. f. Protistenkunde V (1905) p. 91-121. — 6095
Acervulis subrotundis, rubris, 0,25-0,50 mm. diam.; sporis perexiguis, globulosis, 0,8-1,3 μ . diam. germinando sensim in formam baculi 4-10 \times 0,5-0,7 abeuntibus.

Hab. in fimo equino, vaccino, canino etc. in Germania. — Quoad characteres biologicos ex cultura cfr. l. c. ubi de aliis Myxobacteriaceis disseritur.

3. **Myxococcus virescens** Thaxt. — Syll. XI, pag. 461 (nomen). — 6096
Flavus v. flavo-virescens; acervulis globulosis, magnitudine valde variis, 100-1000 μ . diam.; baculis 4-7 μ long.; sporis 1,8-2 μ . d.

Hab. in fimo cuniculino, stercore canino, vulpino, galinaceo in America boreali et prope Berolinum Germaniæ.

4. **Myxococcus coralloides** Thaxt. — Syll. XI pag. 461 (nomen). — 6097
Acervulis dilute rubris, minutissimis, 50-200 μ ., copiosis, forma valde ludibundis; massulis coralloideis processibus numerosis, brevibus, rotundatis præditis; baculis 3-7 μ . longis; sporis 1-1,2 μ . d.

Hab. in lichenibus putrescentibus in Amer. bor. et in fimo putri in Germania.

5. **Myxococcus clavatus** Quehl, Centralbl. f. Bakter. II Abt., XVI (1906) p. 18. — 6098
Pallide rubescens, firmus, erectus, digitiformis v. clavatus, 200-400 μ . alt., supra 150 μ . cr., basi 75 μ . cr., membrana carens; sporis circ. 1 μ . diam.; baculis 3-6 μ . longis.

Hab. in fimo cuniculino frequens, pr. Berolinum Germaniæ.

6. **Myxococcus digitatus** Quehl, l. c. p. 18. — 6099
Pallide ruber, oblongus, erectus, appendicibus digitiformibus parvis auctus, firmus, 75-150 \times 25-40; sporis 1-1,2 μ . diam.; baculis 4-7 μ . longis.

Hab. in fimo ab urbe Capite Bonæ-Spei in Germaniam advecto.

7. **Myxococcus javanensis** Krüff, Centralbl. f. Bakter. II Abt., XIX (1908) p. 386. — 6100
Acervulis rotundis, subinde suboblongis, sessilibus, 70-100 μ . diam., læte rubris; sporis rotundis, crassiuscule tunicatis, 1,6 μ . diam., pro more 2-3 catenulato-junctis; bacteriis immobilibus, 6-7 \times 0,6, bacillaribus, in pseudoplasmodia congregatis.

Hab. in fimo ex stabulo quodam, Buitenzorg insulæ Javæ.

8. *Myxococcus incrustans* Zederbauer in Sitzungsber. k. Ak. d. Wiss. 61
Wien, CXII, Abt. I (1903) p. 474, t. I et II, f. 1-5. — Guttuli-
formis, pallide roseus, gelatinosus, nitidulus, 1-2 mm. alt. con-
fluendo strata effusa rosea formans, ex fungo hyphomycete cum
bacteriaceo symbiotice connexis constans; hyphomyces (*Torula Myxococci-incrustantis* Zederb. l. c.): hyphis repentibus 3-5 μ . cr.,
atro-brunneis, levibus, ramulos conidiophoros brevissimos exeren-
tibus; conidiis catenulatis, facile secedentibus, continuis, atro-brun-
neis, globosis, levibus 4-8 μ . diam.; bacteriacea (*Bacterium Myxo-
cocci-incrustantis* Zederb., l. c.): baculis majusculis utrinque rotun-
datis, 3-4 \times 1,4-1,7, ovoideis, materiam roseam edentibus, in cul-
tura etiam catenulatis.

Hab. in spongia communi gummi arabico imbuta ad gluti-
nandas chartas etc. in Austria. — Genesis et biologia fungilli ite-
rum inquirenda et confirmanda.

